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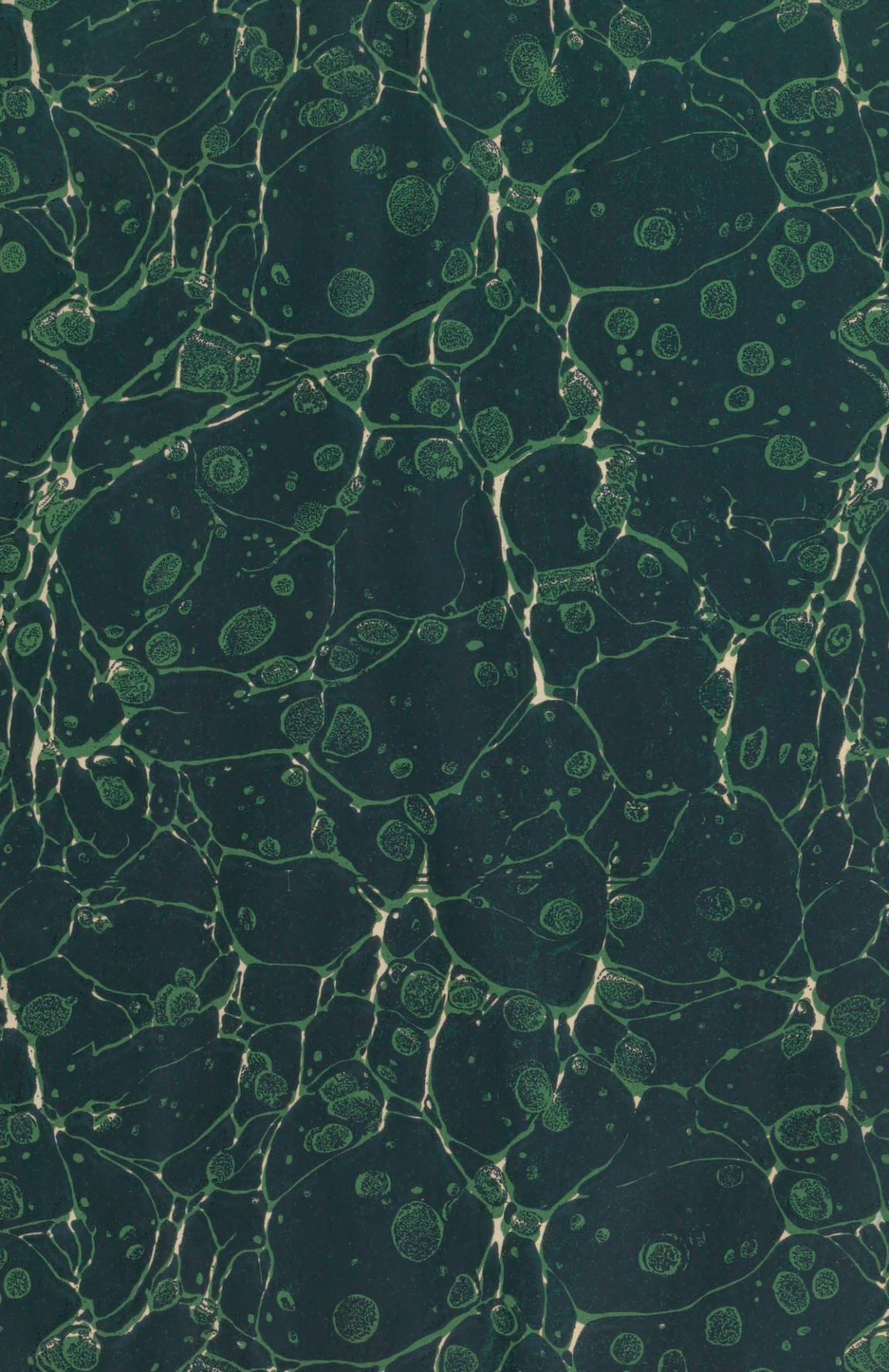
ANNEX

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DR. JOSE A. LOPEZ DEL VALLE

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THE DEVELOPMENT
OF
SANITATION AND CHARITIES IN CUBA
DURING THE LAST SIXTEEN YEARS
(1899-1914)

READ BEFORE THE III CUBAN NATIONAL MEDICAL CONGRESS
HELD AT HAVANA, CUBA, DIC. 1-6 1914

PUBLISHED BY THE SECRETARIA DE SANIDAD Y BENEFICENCIA

HAVANA, CUBA
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DR. JOSE A. LOPEZ DEL VALLE

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GENERAL WILLIAM C. GORGAS.

Sanitary Officer for Havana and Surgeon of the United States Army.—Organizer of the Department of Sanitation.—(From 1899 to 1902).

THE DEVELOPMENT OF SANITATION AND CHARITIES IN CUBA ¹⁾

DURING THE LAST SIXTEEN YEARS

(1899-1914)

By Dr. José A. LOPEZ DEL VALLE

Mr. President, and Fellow Members of this Congress:

Within a few brief days, on the first day of the coming month of January, sixteen years will have elapsed since the creation of our National Department of Sanitation, by the American Government of Intervention, and it seems, gentlemen, that the time has arrived when we, making a slight halt in our career and without laying down our arms of combat for that purpose, should turn our mental vision backwards, in order to cast an affectionate glance over the rugged road already traversed, which by good fortune and to the glory of Cuba and her sons, constitutes a page in history, which redounds to the honor of our native land and to the cause of our common humanity, and to us has been confided the duties of chroniclers of those deeds, in spite of our lack of the needful qualifications for such a task arising from the fact that since the very beginning of the creation of our present organization, we have been only enthusiastic soldiers of the rank and file; but there remains with us, the satisfaction of having duly complied with our duty and having been witnesses and modest participants in those grand battles for the welfare and progress of humanity. Let this, therefore, be the cause which justifies our labor, and the kindness of companions who listen to us, will generously supply whatever may be our deficiencies in the following relation, viz:

On the 1st of January 1899, the American Government of Intervention, assumed the administration of public affairs in the Island of Cuba, and the first and most important task to which it directed its attention and energies was the sanitation of Havana and the establishment of hygienic conditions in all parts of it. The most serious problem which at that time occupied the attention of the Government in sanitary matters, the "palpitating actuality" in all such questions, was without any doubt, "yellow fever", a disease which constantly scourged the principal cities, towns and sea-ports of Cuba, constituting a barrier which up to that time had been unsurmountable, and which prevented the development and progress of this country.

1) Read before the III Cuban National Medical Congress held at Havana, Cuba, Dec. 1-6, 1914.

The foreigner, non-immune to the disease looked at us from afar with horror, justly fearing that he might fall a victim to this so-called yellow endemic, in case he ventured to visit us.

Important and valuable elements kept aloof from our shores, giving to other more fortunate parts of the World on account of their being more healthful, the inestimable treasure of their labors, energies and talents, while over Cuba there hung like a curse the mournful phantom of yellow fever.

And if in "our foreign relations", we had that powerful obstacle, which prevented our development and progress which decimated the lives of foreigners who came to our soil and the Cuban children who were not immune from the infection, the permanent existence of yellow fever among, us, constituting a black stain on the statistics of morbidity and mortality; neither did we lack, and unfortunately in the "interior", other grave and serious problems to solve.

The small-pox, malaria, dysentery, typhoid fever, infantile tetanus, glanders and many and varied other diseases, swept with hopeless periodicity over our inhabited districts, putting Cubans fire-sides in mourning, reaping lives and calling down upon us the stigma of being a backward people in the pathway of progress and culture.

The American Government of Intervention, had therefore, before it on commencing its tasks in Cuba, deep and and interesting transcendental hygienic questions to solve. It was necessary to attack them at their sources, to count on great and powerful energies, extraordinary support, unlimited resources and exceptional faculties in order that these elements combined, should kindle the spark of genius, which creates and accompanies the effective measures of reform, that evil influences destroy.

The first—to create, give life to, and organize new sanitary services which had to be placed on solid foundations and the campaign against infectious diseases. The second—to destroy old and vicious practices, erroneous beliefs and ideas, which in mournful partnership with the sad influences emanating from what is called "vested interests" proved to be formidable obstacles in the way of the work of improvements, social, personal and collective.

Fortunately, the Government of Intervention, had at its command for the noble task it had assumed, all of the elements necessary for triumph; on the one hand, the firm decided and tenacious purposes of those who composed it, to dedicate to the sanitary campaign, all of the necessary means and resources at their command and at whatever the cost might, in order to archieve success; and on the other hand the noble and generous support given to this great work by the sons of our native land, who from the first moment of the reform movement, without hesitating over sacrifices, nor checked by the difficulties which attend all new enterprises, hastily presented themselves, and convinced of the glorious termination which awaited their labors, gladly assumed, each one of them, the post assigned him in the campaign. Some of these, professional practising physicians of high repute,



DR. CARLOS J. FINLAY.

Chief Sanitary Officer and President of the Superior Board of Sanitation, and at the present time Honorary President of that corporation.— (From 1902 to 1907).

were placed at the front of the firing lines, as directors, others acted as soldiers in the advanced trenches—and all, as good soldiers faithfully performed their respective duties.

The public, with marvellously correct foresight, willing seconded the work begun, giving it the warmth of zealous and disinterested cooperation, the people discharged their civic duties without any written law requiring them to do so, and cheerfully submitted to the, at times, severe sanitary requirements. Before the era of light and hygienic progress, which had been initiated, this worthy people held wide open the doors of their soul as well as that of their homes, in order to facilitate, first, the sanitary work and afterwards take an active and decisive part in it. The most severe orders were obeyed by all cheerfully, and with good will.

At late hours of the night the dwellers in infected houses were dislodged and the poor occupant of such a place, without money or other resources and not knowing where to obtain it, without a fire side, and without shelter of any kind, wandered aimlessly through the streets awaiting the expiration of the time required for the disinfection of his humble home and did this, without protest, without asking for any indemnization for what he had been called upon to endure.

The Cuban physician, from the one designated to occupy an important official position, to the one who devoted himself exclusively to his own private practice, from the one who received fees for his services, to the one who lent his aid on account of the scientific enthusiasm, constituted the most powerful auxiliaries, which the government of the American Intervention had in its sanitary labors.

It is only difficult, but impossible for the sanitary authorities to carry on a successful campaign against infectious diseases without the spontaneous and active cooperation of physicians in the exercise of their private practice for they are the ones called upon to state where the infection breaks out and manifests itself; that is to say, where the remedy should be applied promptly and efficiently and this cooperation on the part of the medical fraternity, which at times required the exercise of great generosity, has never been withheld by them, nor have they ever failed in their alliance to the Sanitary authorities of their country which owes an inestimable debt of gratitude to these companions for the sacrifices of their personal interests, which they have made upon the altar of the general welfare of the entire community. This altruistic procedure on the part of the private practitioner, is all the more worthy of admiration when it is remembered that with his "report" of a case of infectious disease he may lose, in certain cases, the client who pays him well for his services, on their being sent to an Isolation Hospital, and in some cases he may suffer ever greater economic troubles, for in some instances his clients may feel annoyed at his report of a case of infectious diseases in their neighborhood and refuse to retain him any longer in his professional character to his further and greater pecuniary loss.

The Sanitary movement, therefore, had from its inception the

aid of these powerful aides, the medical fraternity and the people in general and as a whole; that is to say, it had the support of one of the most necessary elements to success in any attempt to bring about improved sanitary conditions. "Public Opinion", which in Cuba is formed in the first place, by the special adaptability of our people in conforming to the requirements of their surroundings—by their desire for progress—their eagerness for advancement—by the vividness of their imagination of the people of this wonderful tropical country, which causes them to quickly comprehend which is the proper road to pursue:—by the never ending advice of the medical element of the land, and by the aid of the political and professional press, one of the most powerful factors of success in every work of civilization and culture.

Such, gentlemen, were the formidable elements which the Provisional Government of the United States, in Cuba, had at its disposition on organizing the Department of Sanitation of the City of Havana, and it was not venturesome to predict that success would crown their efforts in thus seeking to improve public health conditions.

During the first three months after the establishment of the Department, the only branch of it put into working order was the Sanitary Inspection of the houses and public establishments of Havana. One hundred professional medical men, dedicated themselves with ardor to this necessary work. All of the buildings in the city were visited, the work necessary to put them in sanitary conditions was duly pointed out and to every fireside the "good news" of the coming "new epoch" was carried, and the teaching of hygienic measures, was commenced. A great propaganda of sanitary education was made.

The visits for sanitary inspection showed the tremendous and fearful sources of disease, infection and misery, which existed in this capital. The veil covering the cancerous ulcer was drawn aside leaving it exposed to view. At the same time, the Bureau of Demographic Statistics, was established, and the Bureau of Orders, Archives and Correspondence, were also organized in a rudimentary and imperfect manner. If we have to comply faithfully with our mission as impartial historians, we must confess, that in the beginning, there was no uniform plan of procedure, nor was there any systematic method in the work done, nor any firm, safe and scientific direction of the sanitary affairs, but the good will which mutually existed between those who gave orders, and those whose duty it was to obey them, fully made up for the lack of proper organization.

In April 1899 in the suburb of Casa Blanca, the first two cases of yellow fever which had been registered under the new government, appeared; this event caused the cry of alarm, the spark which announced that the fire which was supposed to be extinct, was latent, and only hidden in the ashes of the past disasters.

With all the urgency the case demanded, the service of disinfection and sanitation was organized, the work of doing so being confided to us, and we were also entrusted with the direction and management.



DR. C. J. FURBUSH.

One of Gen. Gorgas' assistants, and to whom belongs the glory of having given a great impulse to the work against Tuberculosis in Cuba.—(From 1899 to 1902).

The infected house in Casa Blanca were destroyed by fire. The sanitary brigades, afterwards went through the city, street by street, carrying out the important work of cleaning and disinfecting with brilliant success in the reduction of mortality in general, and the resulting effects served as a practical, material and well executed lesson in hygiene.

In June, 1900 the American Government appointed an Experimental Commission, made up of members of the Medical Corps of the Army, which commission among its other labors undertook to verify the discovery of the genial Cuban Finlay, concerning the transmission of yellow fever by means of the sting or bite of the mosquito "*Stegomyia Fasciatus*" which theory with the faith born of conviction, he had sustained some twenty years. Another illustrious Cuban, Dr. Aristides Agramonte, was a member of that commission and is the only one of it who is still alive.

That is to say, that to Cuba belongs the honor of being the birth place of that sapient character who, with the brilliancy of his genius, illumined the path which had to be followed in order to reach absolute scientific truth in regard to the transmission of yellow fever, and upon which its prophylaxies may be placed on a firm basis.

The discovery of Finlay, placed on his august brow the crown of immortality; and it also filled Cuba, his native land with glory—and we, the sons of this prolific soil should feel proud of these facts and especially so, as to another Cuban, Dr. Aristides Agramonte, belongs the satisfaction of having taken a leading part in the official experimental labors for the verification of Finlay's theories.

The Experimental Commission issued its report in the month of February 1901. Consequently the sanitary campaign initiated in 1899 against the yellow fever infection, in consequence of cases which prevented themselves at that time, was not based on Finlay's discovery nor on the report of the experimental commission. In an empirical manner, the work of dissinfection as a remedy against yellow fever was carried on, employing in these cases the same general means as are used in other infectious diseases. Those were attacked and isolated and kept from contact with others. The houses were dissinfected, employing for this purpose copious flushings of solutions of bichloride of mercury, and they were afterwards subjected to the vapors of formaldehyde.

The yellow fever infection, however, far from being eradicated by these means, on the contrary spread throughout the city. The infected mosquitoes fled from the noise and bustle and from the watery solutions and escaped into nearby houses. The means and methods for combatting this disease were multiplied. The sanitary measures adopted by the American Government were principally and almost solely intended for the extirpation of yellow fever, and to that end it employed its most laudable efforts but as such endeavors were not based upon true prophylatic principles; they broke ineffectually upon the hard rock of error.

The sanitary labors in general; the cleaning up of the entire city, a work of transcendental importance gave the most satisfactory results in the way of reducing general mortality as applied to other diseases and especially to pulmonary tuberculosis, but Yellow Fever continued its invading march with a slow, but firm and secure step. In the year 1900, two important commissions were created. The first being that concerning vaccine virus, and the other being charged with the duty of combatting the ravages of glanders, and tuberculosis among animals. The first of these commissions established the general headquarters for vaccine virus, issued order No. 165 and directed general vaccination and made it compulsory and to the second commission is due the credit of establishing a stable of observation for sanitary purposes with its lazaretto for the isolation of glandered animals and with excellent regulations for the cure of these infectious diseases.

With these commissions, the field of sanitary operations was amplified, giving attention to two preventable diseases which were a scourge and a shame for Cuba. The Commission on Vaccine Virus, issued order No. 165 and in virtue of its wise precepts vaccination and revaccination "anti variolosa" was made obligatory in Cuba; and thanks to this prudent and preventative measure, small pox has been eradicated in our territory, and while the practice of vaccination is rigidly enforced, the "dramatic" epidemics of small pox which in past epochs ravaged Cuban soil, will be avoided.

The pursuit, isolation and sacrifice of glandered animals, the inspection of stables, the timely application of hygienic laws concerning glanders, will soon put an end to this infectious diseases, the existence of which, without any doubt whatever, is a stain upon the sanitary statistics of any civilized city in which it is permitted to prevail. On the 6th of May and the 9th of July of 1901, there appeared, the first sanitary order concerning the extermination of mosquitos, they being then officially recognized as the agents for the transmission of yellow fever and an effective campaign against the infection was commenced.

To the to day General, but at that time Major, William C. Gorgas, belongs the glory of initiating measures in accordance with the requirements of Finlay's discovery. The Sanitary Department under the expert, scientific and honorable direction of Dr. Gorgas, organized in due form the campaign against the mosquito. Brigades for the petro- lization, canalization and ditching wherever required, were formed. The houses were visited by inspectors specially charged to prevent the existence of any uncovered deposit or container of water, and to require that all such receptacles be provided with mosquito proof covers.

The workmen provided with their cans sprinkled crude petroleum in all places where mosquitoes might find breeding places, ditches were drained and cleaned out, and creeks, gutters and vacant lots were all subjected to the necessary treatment required in their respective cases and the proceedings for the disinfection for yellow fever were



COLONEL J. R. KEAN.

Sanitary Adviser to the Provisional Governor, and author of the decree which nationalized the Sanitary Services.—(From 1906 to 1908).

radically changed. With marvellous success mosquitoes in infected houses and the neighboring ones, are destroyed by fumigating them with insecticides and yellow fever scientifically attacked in its last redoubts, flaps its black wings and disappears from Cuba.

Gorgas had assistant medical men of high repute, Cuban as well as foreign and among the latter we cite the names of Havard, Furbush, Lyster, Shocking, Le Prince and Mac Cloran, and proceeded with notable skill to organize on an excellent plan the different offices of the Department of Health.

He gave impulse to the compilation of Sanitary and Demographic Statistics; he amplified and placed upon solid foundations the Bureau of Sanitary and Medical Inspection, and those of Orders, Fines and Archives. He established the practice of medical inspection of those attacked by transmissible diseases, the "Medico-Escolar" and Bromatology.

On the initiative of Dr. Furbush, the Dispensary for sufferers from lung complaints was created, and the work of the Sanatorium "La Esperanza" was commenced, in accordance with the plans of Majors Havard, and with the cooperation of "The League Against Tuberculosis", the first steps were taken against this tremendous disease. The "golden age" of the Department of Health of the city of Havana began with Gorgas, Havard and Furbush, and for the glory of Cuba, for from there being any lack of prestige, the Department has steadily progressed in all of its varied ramifications until it has reached the high degree of perfection which it now enjoys.

On the establishment of the Cuban Republic, Gorgas and Furbush were succeeded by Finlay and Barnet, who in accord with the Superior Board of Health, improved and amplified the varied services of the Department, extending their benefits as far as possible to all of the territory of the Republic, establishing for this purpose in conformity with order No. 159, of 1902, Local Boards of Health in the different municipal districts of the country.

Up to this date, may, 1902, it may be said that the operations of the Sanitary Department were limited to the municipal districts of Havana and Santiago de las Vegas.

In some other localities—Santiago de Cuba, Cienfuegos, Matanzas and Santa Clara, there were officers of the Medical Corps of the American Army, who directed and supervised certain sanitary work and medical inspection, but they did not depend upon nor were they delegates or representatives of the Sanitary Department of Havana, as they acted independently of it, according to local necessities and of recognized urgency.

The only branch, which had from the commencement of the American Intervention any national organization with its own proper laws and regulations, was that of the Maritime Sanitation (Quarantine Service), but its operations were entirely independent of the Land Sanitation, and with no administrative connection with it. The Special Commissioners of the Vaccine Virus, of Glanders, and the Special

Hygiene, also, were not dependencies of the above mentioned Department, but each one of them had automatic powers. It was, therefore, within the province of the Finlay-Barnet Regime to execute order No. 169, and implant the first "National Terrestrial Sanitary Organization". The Superior Board of Health and its delegates, Local Health Officers, commenced their labors and soon the shining light of hygiene reached the extreme portions of the Republic, illumining all parts of it, although in but in an slightly effective manner.

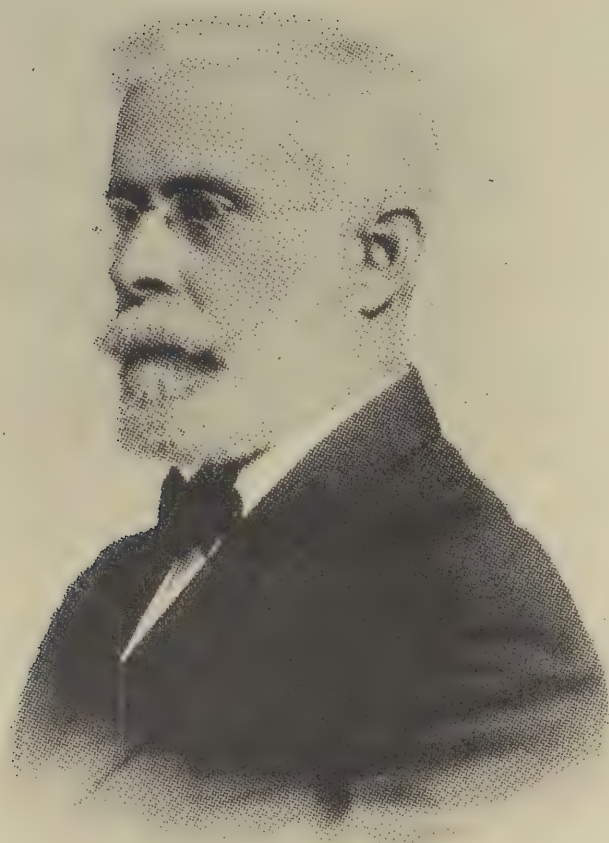
Finlay and Barnet, maintained in a most effective manner all of the sanitary services, and commenced with great zeal the campaign against paludic fever, puerperal septicaemia and infantile tetanus. Finlay originated the "Aseptic packages for the Cure of the Umbilical Cord," after child birth, and to the Superior Board of Health, is due among other works of great value, the Sanitary Ordinances, now in force, which were promulgated in February, 1906 and of which Dr. Barnet was the adviser and compiler, and who as a member and Secretary of the Board was always in the first rank during the debates of that organization. Up to the time, no general code of sanitary regulations had existed, nor had the different sanitary dispositions and orders been compiled, and it can be said that the operations in connection with the sanitary matters, were carried on without any "written law of a general character", so that the public did not know in a precise and concise manner how to act in order be within the scope of the hygienic laws.

At the begining the sanitary organization from 1899 to 1902, the sanitary orders with the exception of those concerning Quarantine, Immigration, Vaccination and a few other special ones—were discretionary that is to say orders dictated according to the personal ideas of the head of the Department and put in force, invoking in each case the name and powers of the Military Governor; at other times, the City Council was appealed to in order to force obedience to these orders as though they were Municipal Ordinances.

The sanitary legislation was initiated with the laws and regulations of Quarantine in 1899, and by those of Immigration, in 1900. Sanitary laws to cover special cases such as those concerning Yellow Fever, Vaccination, Glanders and Special Hygiene were afterwards dictated. Up to May 1902, when Order 159 was promulgated, and later its by-laws, or Sanitary ordinances, rules and regulations, there was not a single law or sanitary ordinance which was applicable in all cases.

The ordinances came, therefore, when needed to fill a vacuum in Sanitary Organization, and to give it "legal and effective life", equitable and in harmony with the requirements and orders of the Sanitary Department.

The Superior Board of Health, published under the direction of Dr. E. B. Barnet, with the colaboration of other notable medical men, "The Manual of Sanitary Practice", a work of truly transcendental value giving the most important information and instructions. The work contained chapter on the etiology, symptomatology, clinical



DR. JUAN GUI TERAS.

One of the organizers of Cuban sanitation. Now Director of Health.

forms an the prophylaxis of most frequent trasmissible diseases in Cuba, as well as a description of the organization and progress of its principal sanitary organizations.

For the space of four years, from 1901 to 1905, the Republic was kept free from yellow fever, but at the end of that time, in October, 1905, it reappeared in Havana. imported from New Orleans, it developed quickly and spread rapidly throughout the country.

The infection was propagated in the interior of the Republic, its greatest ravages occuring in Santiago de Cuba, Cienfuegos, San Nicolas and on different sugar plantations, and in the towns of the Province of Santa Clara. Under the direction of the Superior Board of Health, with Finlay and Barnet as its chief moving spirit, and under Kean and Guiteras; later on, an energetic and effective campaign against yellow fever, was organized, which, after titanic efforts succeeded in again extinguishing it on Cuban soil.

We have shown that during the period of the first government of American Intervention, from the first of January 1899, to the 20th of May, 1902, the land sanitary service, lacked a national organization, and even laws to govern it in a uniform manner and give it proper faculties and rights, besides which, the Sanitary Department was limited in its operations to Havana, Guanabacoa, Marianao and Santiago de las Vegas; in other towns of Cuba, sanitary matters were carried on by the City Councils, or local municipal authorities, which with the exception of Santiago de Cuba, Cienfuegos, Cárdenas, Matanzas, and some few other exceptional cases, gave little or no attention to such matters and allowed only the most ridiculous and insignificant sums for the expense of sanitary work in their respective towns.

The Government of the American Intervention, desiring the organization, in a uniform manner of all Sanitary matters throughout the entire island, with laws to aid and give it legal force to its operations, promulgated at about the same time it was ready to turn the government over to the Republic of Cuba, Order No. 159 of 1902, in virtue of which the office of the Superior Chief of the Sanitary Service, was created with such powers as would enable him to secure compliance with all sanitary orders, and requirements throughout the entire island. The Superior Board of Health, which was given the necessary authority to undertake the "study of the causes which produced diseases and which become epidemic among human beings and animals and published the results of the investigations concerning the causes which produce paludic fever, the effect it has on public health, with accompanying conditions, customs, localities, as well as the beverages and medicines consumed".

It was urged upon the Superior Board of Health, that it should request the Executive Power in its turn, to transmit to the Legislative Powers, the changes, additions, etc. which were required in sanitary laws and regulations, and that the Board should be endowed with ample faculties, and powers to exact information, reports, dates and antecedents from the directors and managers of charitable institutions,

and that it should also be given power to exact from corporations, compliance with all orders concerning sanitary officers.

The Superior Board of Health had the direction of the sanitary affairs of a general character, to which it added the rights and duties of the old time Special Commissioners on Vaccine Virus, and Glanders. The Board also had conferred upon it, the supervision of the different medical and sanitary methods applied to Tuberculosis, Special Hygiene and Leprosy.

The Superior Board of Health had ample powers, and its resolutions have an executive character. It was composed of a Superior Chief Sanitary Officer, as President, and eleven members, divided into two classes, effective and honorary. The first were, the Chief Sanitary Officer; the President of the Commission on Special Hygiene, and three members, one resident in Havana, one representing the western and the other eastern part of the Island of Cuba.

As honorary members with voice but without vote, in the proceedings of the Board, there were the Chief Medical Officer of the Port of Havana, later Chief of the Maritime Sanitary Service; the President of the League Against Tuberculosis, and a representative for each one of the following institutions, viz: The Academy of Sciences, the National University, the Board of Education and the Faculty of the School of Law.

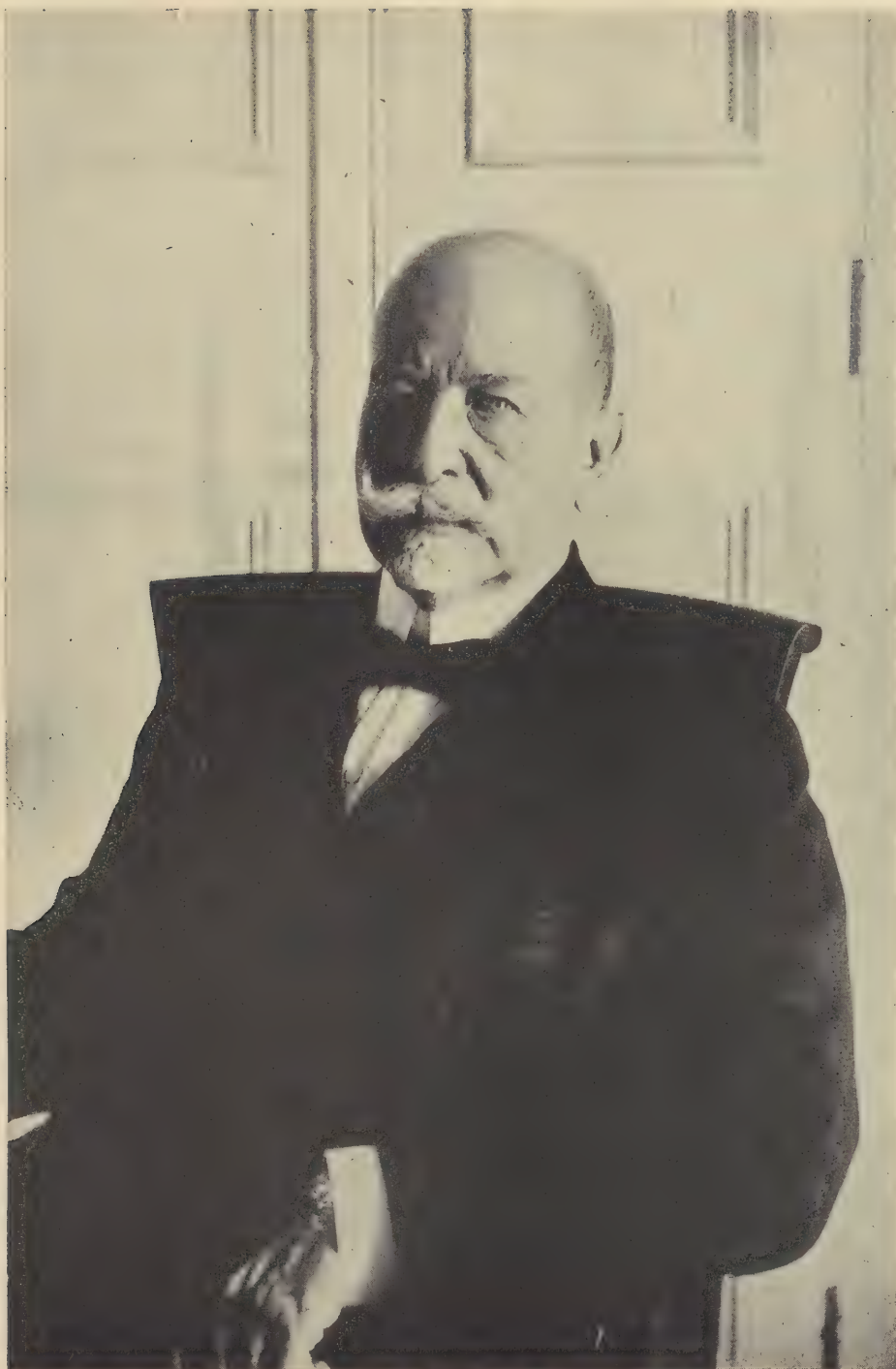
On being duly constituted, the Superior Board of Health, proceeded in accordance with the law which had created it, to dictate the sanitary measures of a general character which were to be applicable to all of the different municipal districts, and also to recommend the adoption of the wisest means for the protection and preservation of public health.

It published books, pamphlets, circulars and leaflets in order to popularize scientific and proper methods of procedure in all that applies to sanitary matters, and gave its attention to pulmonary tuberculosis, diphtheria, infantile tetanus and it combatted epizootic complaints which decimated domestic animals.

The Board of Health, organized the National Laboratory, fitting it up with all the necessary resources and appliances for the preparation of serums and vaccines lymph for gratuitous distribution.

The administration of the sanitary matters in different municipal districts, was confided by Order No. 159 to the Local Boards of Health of each Municipality, which were formed by the Local Chief Sanitary Officer, as President and Executive Officer, the Chief of Special Hygiene Service, and two representatives appointed by the municipality and approved by the Superior Board of Health as members. These Local Boards of Health, were governed by the general sanitary regulations adopted by the Superior Board, of which they were delegates.

Besides exacting compliance with the hygienic precepts of a general character, the local Boards were charged with the supervision



DR. FERNANDO MENDEZ CAPOTE.
Director of Charities.

of public health in its districts, but under the jurisdiction and government of the Superior Board.

Order No. 159 decreed that the current expenses of the Local Boards, as well as the cost of all other sanitary services should run for the account of and be borne by their respective municipalities, with the exception of Havana, which would continue to be borne by the State.

The municipalities of the Republic following a traditionary custom, did not include in their estimates of expenses (budgets) a sufficient sum to cover the cost of these important services, and for this all powerful reason, for the most absolute lack of the means of life, the Local Boards and with them, the Local Chief Sanitary Officers, were unable to perform their functions and duties, and were so to speak, "tied hand and feet" and without the necessary elements of combat.

There existed, on the theoretical ground, a very complete sanitary organization and it seemed at first sight on considering the matter only from what was written concerning it, that the sanitary problem in Cuba had been solved, because a law existed which required that sanitary services should be established in all parts of the Republic, and which should be executed in what appeared to be a complete and finished manner.

But, nevertheless, on the basis of tangible facts and in practice it turned out that the well conceived precepts of order No. 159, could not have effective application because of certain powerful reasons, among which, the absolute lack of resources was the principal one. The municipalities, in place of providing the material elements necessary for the work, left the Local Boards of Health unendowed, and they led a languid life with anemic conditions on account of misery.

In Havana, the sanitary campaign was maintained in full vigor, the services were improved and made more extensive, for all expenses incurred by the Sanitary Department in its work was borne by the State, and thanks to this provisory measure, the capital was well defended against infectious diseases, and far from losing the prestige already gained, the sanitary organization, under the wise guidance of the men appointed by the Government to direct and manage its affairs, was enabled to infuse new impulses and greater encouragement in to those in charge of its various and varied services.

We have seen already that unfortunately the same conditions did not exist or prevailed in other parts of the nation. The Local Boards of Health, had neither the necessary economic resources to attend to the important services required of them, nor had they the authority and independence necessary for free and oportune action. They were subordinate to local political interests, and for these reasons the effort of the central power, lacked force, and its endeavors to maintain an energetic and well sustained sanitary situation in all parts of the Republic proved unavailing.

These certain and grave facts, were made conspicuously manifest on endeavoring to organize a vigorous campaign against the yellow

fever scourge in the towns in the interior of the Republic, where the disease was invading in a threatening manner important centers of population and industry. The Superior Board of Health promptly responded to the exigencies of the situation, with special commissions, and with men and material hastened to the seat of peril, where the infection was "drowned", but no sooner was this done in one place, than the "Sanitary Brigade", had to hurry off to some other infected spot, leaving, the place just placed in sanitary conditions to fall back after the danger had passed, into the same condition that almost always had existed. It was a case which required an "urgent remedy" and which lacked prophylaxis and "posterior treatment".

At the time of this outbreak of yellow fever, infectious diseases appeared; paludic and typhoid fevers and diphtheria. Severe outbreaks of these diseases were overcome by the intervention of the Central Sanitary Office, but later on sporadic cases of these diseases, in chronic form, claimed their victims, while the sanitary department was not in proper condition, and had not the power to combat them in a decisive manner.

These particulars, clearly showed the imperious necessity of "nationalizing" the sanitary services and of placing them under the personal responsibility of a "local sanitary authority", with powers and elements necessary to direct and develop it with energy and efficiency.

Two distinguished Cuban physicians, Doctors Malberty and Albarran, who were representatives to Congress, the former from Havana and the latter from Santa Clara, had already studied and considered this particular. Dr. Malberty, introduced a bill in Congress providing for the creation of a Department of Public Health, but it was never promulgated as a law.

To Colonel Jefferson Randolph Kean, Sanitary Advisor of the Provisional Government of the United States in Cuba, belongs the glory of having been the author of the decree of nationalization of the sanitary services of the Republic of Cuba, and of properly equipping and sustaining the local sanitary offices throughout the entire island.

Order No. 159, of 1902, which was the organic sanitary law, had the grave defects of which we have herein lightly touched upon, and which did not produce the favorable results which its authors had predicted, was followed by Decree No. 894 of 1906, which organizes in a precise and practical manner the different sanitary dependencies, equipping them with the necessary elements for maintaining its accounts with the State, unifying the service and placing them all under the immediate direction of a chief and a National Board of Health.

The local boards of health of Order No. 159, which lacked the means of existence, and the elements necessary for combat, which did not have the requisites powers for exercising an effective authority, so that a proper idea of the responsibility for the progress of the entire sanitary services should be diffused among the entire corps composing it, were succeeded by the Local Chief Health Officers



DR. ENRIQUE B. BARNET.

One of the organizers of Cuban sanitation. Member and Secretary of the Superior Board of Sanitation; Executive Officer of the Department of Sanitation with Finlay, and at the present time Chief of the Section of Library and Publications of the Department.

of the Kean decree, with all the resources, rights, authority and responsibility pertaining to their positions respectively.

Sanitary conditions in the interior of the Republic began at once to prevail, and so to speak, became an accomplished fact when this opportune, wise and practical law became applicable.

It may be said that from the year 1906 in which the Decree for the nationalization of all matters pertaining to sanitation became effective, new and vigorous life was engendered in the field of work among the sanitary organizations in different towns in Cuba, which with the exception of Havana, Regla, Guanabacoa, Marianao, Santiago de las Vegas, Matanzas, Cienfuegos, Cardenas, Santiago de Cuba and some few others lacked a real and effective sanitary organization and administration..

Decree 894 of 1906, created the National Board of Health, under the jurisdiction of the Office of the Secretary of the Interior, and was made up of the following entities, viz:

- (a) A National Chief Sanitary Officer.
- (b) A National Board of Health.
- (c) The individuals and materials necessary for the office and institutions of the Department.
- (d) A local chief health officer for each one of the municipalities of the Republic with the individuals and materials necessary for the execution of the sanitary ordinances.
- (e) The temporary employes necessary for preventing and combatting endemic diseases.

The National Chief Sanitary Officer, was the President and Executive of the National Board of Health, and was charged with the supervision of all the sanitary services of the Republic, to make out the estimates (budgets) for the expenses of the Department, to exact compliance with the prevailing sanitary laws, regulations and dispositions, as well as with the resolutions of the Board of Health. There was also confided to him the direction of Hospitals of Isolation and there was given him authority to establish interior quarantine and exact compliance with the sanitary orders, by the functionaries of State, Province or Municipality.

The National Board of Health, was composed of the Chief Sanitary officer, as President, and the Chief Clerk of the Department, as Secretary; the other member being the President of the Commission on Infectious Diseases, the President of the Commission of Special Hygiene, the Local Health Officer of Havana, an engineer and a lawyer.

The Board was charged with the supervision in general of the various matters connected with public health to exact due observance of all sanitary laws as well as those which regulates the exercise of the profession of medicine and surgery, pharmacy and veterinary and dental surgery.

It was moreover the duty of the Board to carry on investigations and studies concerning epidemic diseases, to publish the result of such

studies and to compile and distribute popular instructions in order to make scientific knowledge common among the people, and to employ persons necessary for special sanitary services, or experts to carry on direct special studies relating to preventable diseases.

There was confided to the National Board of Health, executive powers for the government and administration of sanitary matters in general, which were called to the attention of the Superior Board of Health, of Order 159, and every thing connected with the services of Tuberculosis, Special Hygiene, Leprosy, Vaccination, Anti-Varioloid Laboratories, Dispensaries, and Tuberculosis Sanatoriums. Decree No. 894, preconceived the idea that all sanitary officers pertaining to each municipality, should be administered by a Local Chief Health Officer, as the representative in his municipal districts, of the National Department of Health, and who was to act under the direction of the Chief Sanitary Officer of the Republic, and among the duties and rights of the Local Chief Sanitary Officers were included.

(a) The appointment of necessary assistants, according to the classification established in Decree 894.

(b) The establishment and maintenance of the following services, viz:

The cleaning and sprinkling of the streets.

The collection of garbage and other refuse.

The public and private disinfection.

The filling in and drainage of lands.

The Local Chief Sanitary Officers are required to watch over the public health of their respective districts, and to exercise general supervision over sanitary matters, to apply and exact compliance with the ordinances, regulations, circulars and other dispositions of the Department.

Decree No. 894, provided that all expenses incurred by the various services created by it, should be borne by the State, with the exception that the municipalities should contribute to the payment of these expenses to the amount of ten per cent of their receipts and this prudent and well conceived idea in that efficient law is the secret of the extraordinary success achieved by it.

Thanks to that effective organization, to the excellent law which protects it, and to the elements of economic order provided for it the National Department of Health, at whose head figured Kean, Finlay, Guiteras and Barnet, with the illustrious members of the National Board of Health, could undertake with positive powers for triumph, the most arduous and difficult sanitary campaigns.

There was organized in all parts of the Republic, in a most complete manner, the campaign against yellow fever, paludic fever and other infections. There was established even in the most remote regions of the Republic, the services of Medical and Sanitary Inspection, of Disinfection, Statistics, Correspondence and Sanitary Archives, of Orders and Fines, as well as the enlarging and extending of work connected with the street cleaning and sprinkling and the collection



DR. MATIAS DUQUE.

First Secretary of Sanitation and Charities.—(From Jan. 1909 to Nov. 1909).

and disposition of garbage. The campaign against mosquitoes was organized and began with vigor; succeeding, thanks to these well directed labors in again eradicating yellow fever from Cuban soil, which disease like a fearful phantom passed over the confines of the Republic, sowing grief and death in its path.

With the nationalization of sanitary operations, and with the unification of such labors, began the work of positive sanitation and beginning about of hygienic conditions in Cuba.

All Cubans should keep in affectionate remembrance Colonel Kean, the grand organizer of Cuban sanitary methods, and the good and modest man, who consecrated with all his soul, his greatest talents to the improvement of sanitary conditions in Cuba. May the expression of our gratitude reach him on the wings of affection.

Sanitary authority, the necessary economic resource with laws to uphold, and with a people disposed to lend their aid, are needed in order to faithfully fulfill the duty of watching over public health.

The prolific field of hygiene should not be limited by a narrow horizon, but should be left free and untrammelled, and its sphere of action extended, for hygiene has to protect man from the moment of his conception in the maternal womb to beyond what seems to be the limit of human affairs, up to the time of his death!

Hygiene in its marvellous advancement, in its noble aspiration to better the condition of man, to procure for him the enjoyment of a strong and vigorous life, to free him from perils which might compromise his existence, to enact laws to prevent disease, accidents while at labor, fatigue and misery, to provide for him a comfortable home, cheerful and economical, were each individual may find his existence placid and agreeable and free from diseases, which paralyze his efforts in life's struggle.

Hence sanitary authority is called upon to apply hygienic precepts to give them national and administrative life, to apply proper means to the end sought. and has, in the discharge of its mission in defense of public health, to dedicate its time and attention to two principal points, the first is to "prepare the ground". that is the citizen and put him in a situation that such diseases cannot break through his lines of defense, so that he may always conquer in the struggle carried on between the microbe which attacks and the phagocyte which defends him.

In order to reach this beautiful termination of sanitary labor, it is necessary that man should be carefully protected from the time he is conceived in the maternal womb, by bestowing proper hygienic attention upon the mother, later it is necessary to look after his food, clothing and hygienic surroundings; arriving at the age of puberty, it is necessary to follow and watch over him in the school-room, directing him afterwards in the exercise of his trade, profession or commercial pursuits, to which he dedicates himself, exacting adequate hygienic conditions in the house in which he resides, the factory or office in which he is employed; the place in which he spends his leisure

hours, the neighborhood and town in which he lives, without ever abandoning him, and endeavoring always to surround him with comforts, sane pleasures and enjoyable environments, thus driving from his side the cause of disease and of affection. The second problem to the solution of which sanitation has to direct its attention, is the infectious diseases which threaten life and to maintain settled districts in a condition of cleanliness, abundantly supplied with good potable water, proper drainage, complete urbanization, hygienic construction of public buildings and private residences with all accessories pertaining to them, and thus, as far as possible maintaining these "intermediate agents" free from infection, in order to break the "infecting chain" by depriving them of their links.

The real positive defense of a populated district against determined infectious diseases, must have for its base the prevention of the existence of such "intermediate agents" and the opportune use of vaccine virus, and immunizing serums, in cases where these remedies are necessary.

To day, with the facility and rapidity of communications which exist between distant countries, independently separated each from the others; the exigencies and necessities of trade and commerce, the exact knowledge which now have of certain transmissible diseases, it is not possible to confidently expect that the application of quarantine laws and regulations, however rigid and faithfully executed can protect us from the arrival at our shores of certain infectious diseases imported from abroad.

The real and effective triumph of modern hygiene has been the ascertaining with exact and almost mathematical precision the intimate mechanism of certain infections. Bacteriology, with its prodigious progress, with its marvellous discoveries, has withdrawn the dense veil which the ignorance of the past epochs had drawn over the etiology of the most formidable preventable diseases, establishing by experiment and clinical research upon a solid foundation the bases of modern prophylaxis.

The empiricism of quackery of past times and the dangerous calculations and vacillations, born of errors on the part of the hygienist of by gone days, have been superseded by the firmness, and certainty of modern sanitary methods which should proceed without doubt and free from uncertainties, like the man conscious of his powers, certain as to the sources of his knowledge, and firm in his creeds, for these rest upon scientific truths proven upon the unyielding anvil of experiment and practice, and it is necessary for the sanitarian, taking advantage of these scientific researches to carry them to the field of practice in the defense of public health, and cause them to be complied with in the interest of the general welfare, and that, gentlemen, is certainly one of the fundamental principles of modern sanitary practice and its true significance.

We must agree that it is necessary to maintain the populace well defended against cholera, by other means besides the appropriate



DR. MANUEL VARONA SUAREZ.

Secretary of Sanitation and Charities and President of the Committee on Sanitary Affairs of the House of Representatives. At the present time a member of Congress for Havana province.—(From November 1909 to May 1913).

application of quarantine laws and regulations, to supply it with pure water, well chosen and distributed. We should not consider a city of great commercial importance, and of a great floating population, absolutely free from the danger of the Bubonic plague, unless, in addition to quarantine laws, we organize and maintain in proper manner the "cold blooded" campaign against rats; also the certain defenses against small pox, is to keep the people well vaccinated against the infection.

And in regard to yellow fever and paludic complaints, neither the vigorous application of quarantine laws and regulations, nor the isolation of these attacked by these diseases is sufficient, it is necessary that the scene of operations, be kept free from mosquitoes, especially stegomyas and anopheles.

The evidence of the truth of the above statements were brought forth during the epidemic of yellow fever in Cuba from 1905 to 1906. We, with the results obtained, during the first campaign, that of 1901, in which the most flattering efforts followed the rapid and adequate isolation of those attacked and the fumigation of infected houses, and we attributed to these practices the supremacy in that kind of work and to them we devoted our preferent attention, relegating to a place of secondary importance "petrolization", and the campaign against mosquitoes in general, and for this reason, and in consequence of the fact that in the towns of Cuba there are immense swarms of stegomyas, yellow fever in 1905 took on a fearful increment aided by the many and varied means which are always opened for the development of epidemics when proper steps are not taken to suppress the *sources* of propagation of disease.

Typical cases unknown to the sanitary authorities, ambulatory cases of those whose condition is made known only after they have passed through a town and have infected it, on account of diagnosis too long delayed by symbiosis, or the lack or exacerbation of symptoms which are considered as pathogenomic. Patients who are without medical assistance, and other analogous cases are those which can spread an epidemic and carry it from one locality to another, rendering the efforts to dominate it sterile, when such efforts are not especially directed to the absolute dominion of the "intermediate agent" to which sanitary measures can be more effectively applied.

It is honorable to confess, that at the commencement of the yellow fever epidemic in 1905, the Sanitary Department had not been able to organize in the Republic, a general and effective campaign against mosquitoes, on account of the substantial defects of Order No. 159, and the lack of the monetary elements necessary to make it effective, and from the erroneous supposition, furthermore, that the campaign should be commenced and carried on by isolating those attacked with the disease, and by disinfecting the infected houses.

The first and most positive demonstration of the indisputable efficacy of the nationalization of Cuban sanitary matters, according to the plans of Kean, contained in Decree No. 894 of 1906 was the power

to establish in all parts of the Republic, provided with sufficient resources in money, men and material, was the service of the extinction of mosquitoes, with which, the control of yellow fever and the decrease of paludic fevers were achieved. The Cuban sanitary service could then be developed on a firm and secure basis and could organize and maintain its different branches, duly provided with all indispensable necessities. The prophylaxis of preventive diseases could then be established on the modern conquests of hygiene, and for these reasons the nationalization of all sanitary measures, was the most certain step towards further advance which up to that time had ever been taken, for bringing about healthful conditions in this beautiful and blessed land.

Fortunately, the Provisional Government of Cuba, far from halting on the road it had commenced towards sanitary progress, continued its onward march, dictating laws and regulations for the improvement of its various services, and stimulated by the great benefits already produced, created in 1909, on amending the Organic Law of the Executive Power, the "Department of Sanitation and Charities".

With the promulgation of that laws, which established a Department of Sanitation and Charities, we have arrived at the full development of our health and charitable organizations, and have reached a degree of advancement and perfection, such, that Cuba is placed in the first rank among the most advanced nations of the earth, which bestows the most careful attention upon these important and transcendental matters.

The evolution of health and charities among us, in its legal aspect, may be condensed in the following form, viz: in the previous epochs from 1899 to 1902, the powers and faculties were vested in the Chief Sanitary Officer, who dictated measures of an urgent character, which could not be based on a any previous legislation; from 1902 to 1906. these faculties were conferred upon "collective" organizations, that is, upon the Superior Board of Health, the Central Board of Charities, the Local Boards of Health, and the Boards of Patrons and Special Sanitary Commissioners.

In 1906, Kean, initiated sanitary legislation inspired on his own "personal responsibility" theory; this legislation created a local health officer, in place of the old time local boards of health. It concentrated in the National Board of Health the powers of Special Commissions and goes on marking out the new route of making "unipersonal" the duties and rights of officials of health and charities, an advantageous practice with a saving tendency, as it makes it easy to govern such matters, and gives birth to a true conception of responsibility and duty.

The Superior Board of Health of Order No. 159 of 1902, and the National Board of Decree No. 894, which were "consultive" and "executive" organizations, were succeeded by the National Board of Health and Charities of the Organic Law of the Executive Power in



DR. ENRIQUE NUÑEZ.

Professor of Havana University. At the present time Dr. Nuñez, holds the Sanitation and Charities portfolio.

1909, which is a consultive body of the Department of Sanitation and Charities. The organic law confers upon the Secretary of the Department, the powers to supervise the different services and dependencies of health and charities, which are placed under his superior direction and personal responsibility, in this manner unified, well regulated and directed, the divers matters connected with health and charities are easily managed, giving them a course of procedure, fixed, well defined and harmonious, as is demanded by uniform scientific judgement.

According to the precepts of the Organic Law of the Executive Power, the office of the Department Sanitation and Charities is divided in its functions, into two different branches, that of health and that of charities, which with the National Board of that division, constitutes the superior organizations of these important components of the Public Administration.

To the Board of Sanitation, belongs the duty of the supervision of the different organizations and dependencies of a health nature, and of institutions and establishments of a hygiene character, such as are lazarettuses, isolation hospitals, bacteriological laboratories and those where serums, vaccines lymph, etc. are prepared.

This Board in the exercise of its official functions, directs the local health officers, and has the necessary faculties for exacting from them periodical reports concerning the progress of their respective labors, together with such memoranda and records as may be judged necessary for the good of the service.

The Sanitary Directory, is made up of the following Bureaus, viz:
First. Central.

Second. Sanitary Services of Havana.

Third. General Matters and Quarantine.

Fourth. Special Hygiene.

Fifth. Statistics, Correspondence and Archives.

Sixth. Personnel, Properties and Accounts.

Through the Chief Clerk of the principal office, these bureaus send reports to the Director of Sanitation, concerning the inspections made of the sanitary service of the Republic; of the municipal sanitary service which requires the interevention of the Department; of Laboratories, Isolation Hospital, as well as those for infectious diseases; Dispensaries; Sanatoriums for Tuberculosis, headquarters for Vaccine Virus; of compliance with the regulations for the exercise of the professions of Medicine, Veterinary, Pharmacy, Dentistry, Obstetrics, Vaccination, Undertaking; laws which regulate noxious or dangerous establishments; matters relating to the Quarantine service and the preparation of sanitary and demographic statistics of the Republic.

To the Directorate of Charities, is given charge of all matters relating to the inspection of Institutions and Establishments of a charitable nature, subject to the jurisdiction of the Secretary's office, with authority to exact from the functionaries in charge of them all information concerning their respective establishments that may be considered necessary. The Director of Charities under the authority of

the Secretary, has charge of all matters relating to official or governmental charities, having the inherent rights and duties connected with the tutelage of abandoned children.

The Bureaus which make up the Directorate of Charities, are the following, viz:

First. Administration and Inspection.

Second. Hospitals and Asylums.

Third. Minors.

Fourth. Personnel, Property and Accounts.

These organizations have within their own proper sphere of action, that of reporting to the Directorate, all matters administrative and legal connected with the charitable institutions under the jurisdictions of the Department of Sanitation and Charities, as well as everything connected with the administration of properties belonging to the Department of Public Charities; matters of a technical character connected with the administration of properties belonging to the Department of Public Charities; matters of a technical character connected with the Hospitals and Schools for Nurses; technical inspection of Asylums and establishments of charities; matters connected with the care and correction of abandoned and delinquent minors; and the placing of them in respectable families; of minors under the protection of public charities, including those found in Preparatory Schools and those who are discharged from Reformatory Schools.

As a consultive body, the Department of Sanitation and Charities, has the National Board, which has a special duty, that of watching over the security and good conditions of charitable institutions, as well as the proper investment of funds donated, to the State for charitable purposes on the recommendation of the Secretary of Sanitation and Charities, together with such inspections as may be deemed necessary, in order to obtain the security and due progress of these services. The members of the National Board, have the right to examine, at any time, the results of inspection made of charitable establishments, as well as the reports sent in by the functionaries of said institutions, and also all documents relating to their condition and progress. It is within the sphere of action of the National Board, to study all projects and resolutions of a sanitary character, and to submit its opinion concerning them. It should investigate and set forth for the consideration of the Secretary, the effects of existing sanitary laws and regulations, indicating to him, for his recommendation to the National Congress, such changes and additions as in his opinion should be introduced into the sanitary laws and regulations.

It is the duty of the Board to listen to the committees in representation of trade and commerce, or other interests, who have complaints or reclamations to make for such injuries as they may receive (or have received) from the application of sanitary measures at present in force, or projected and make out, as a result of its study, a report to be submitted to the Secretary for his decision thereon.

Whenever the Secretary considers it necessary, the Board may



The National Board of Sanitation and Charities meeting in session.



The Commission on Infectious Diseases.

investigate misdemeanors committed in charitable institutions, or the complaints made against the functionaries attached to them, in which case, it can take sworn testimony, claim the presentation of books and documents, cite witnesses and take such other steps as may be necessary to arrive at the truth in the matter.

The office of the Secretary of Sanitation and Charities, has also the assistance of the service of the General Inspection of Sanitation and Charities, of which there are two General Inspectors, one for each branch. It is the duty of these general inspectors to exercise the inherent functions of their office, according to the interventions of the Secretary.

It has medical inspectors appointed to the service for the purpose of securing compliance with the measures resolved upon.

The Directors of Sanitation and Charities have also special medical inspectors whose duty is to make periodical visits to the institutions of health and charities in order to inform themselves as to their condition and how they are conducted.

The sanitary affairs of each municipal district, are in charge of the Local Health Officer who are responsible for the execution of all ordinances, regulations and Circulars of the Department of Sanitation; the imposition of fines, which may be necessary for lack of compliance with, or the infraction of the those regulations; domiciliary sanitary inspections of buildings, private residences as well as public establishments; to enforce strict application of the regulations concerning the installation of sanitary appliances; approval of plans and projects for the construction of buildings, and the installation of water faucets, drains and appliances for sewerage; the work of disinfection in general; matters in connection with infantile hygiene, and all particulars concerning public health in their respective districts. At present there are one hundred and seven local health officers, and eighty-seven appendices or special sanitary services for small towns in existence in the Republic of Cuba.

Whenever the interest of public health so demands, the Secretary of Sanitation and Charities has powers to create special Sanitary Services in order to combat epidemic diseases, employing for that purpose such sums as may be necessary for the payment of men, material and appliances made use of in such additional public services, besides which, he can appoint expert functionaries, who under the title of "Special Commissioners" act rapidly and energetically to combat such sources of infection as may present themselves. The Secretary has also the power to dictate all the orders which he may deem opportune for the establishment of Interior Quarantine, and other measures for isolation, disinfection and inspection which in his judgment are required in defense of the public health.

On the re establishment of the Republic in the year 1909, the Organic Law of the Executive Power was put in vigor and consequently in accordance with its provisions, the Department of Sanitation and Charities was created, Dr. Matías Duque, being the one designated to

hold that office, and he, with great activity established the different services specified in that law, besides which, he organized the Section of Scientific Studies and Investigations, which sections was most competently carried on by Dr. Mario G. Lebrede; he created the Directorate of National Sanitary Engineering; he amplified the service of "Medico-Escolar", and organized the Corps of Nurses of the Tuberculosis Dispensary and the Section of Library and Publications, this latter section having charge of the preparation of the Official Bulletin of the Department a notable publication, which on account of its great merit, has been the herald of our culture to the entire world.

At the head of this Section, figures Dr. E. B. Barnet, one of the organizers and directors of Cuban Sanitary operations. To Dr. Duque, belongs the honor of having been the first Secretary of the Department, and having demonstrated ardor and good judgment in his official acts.

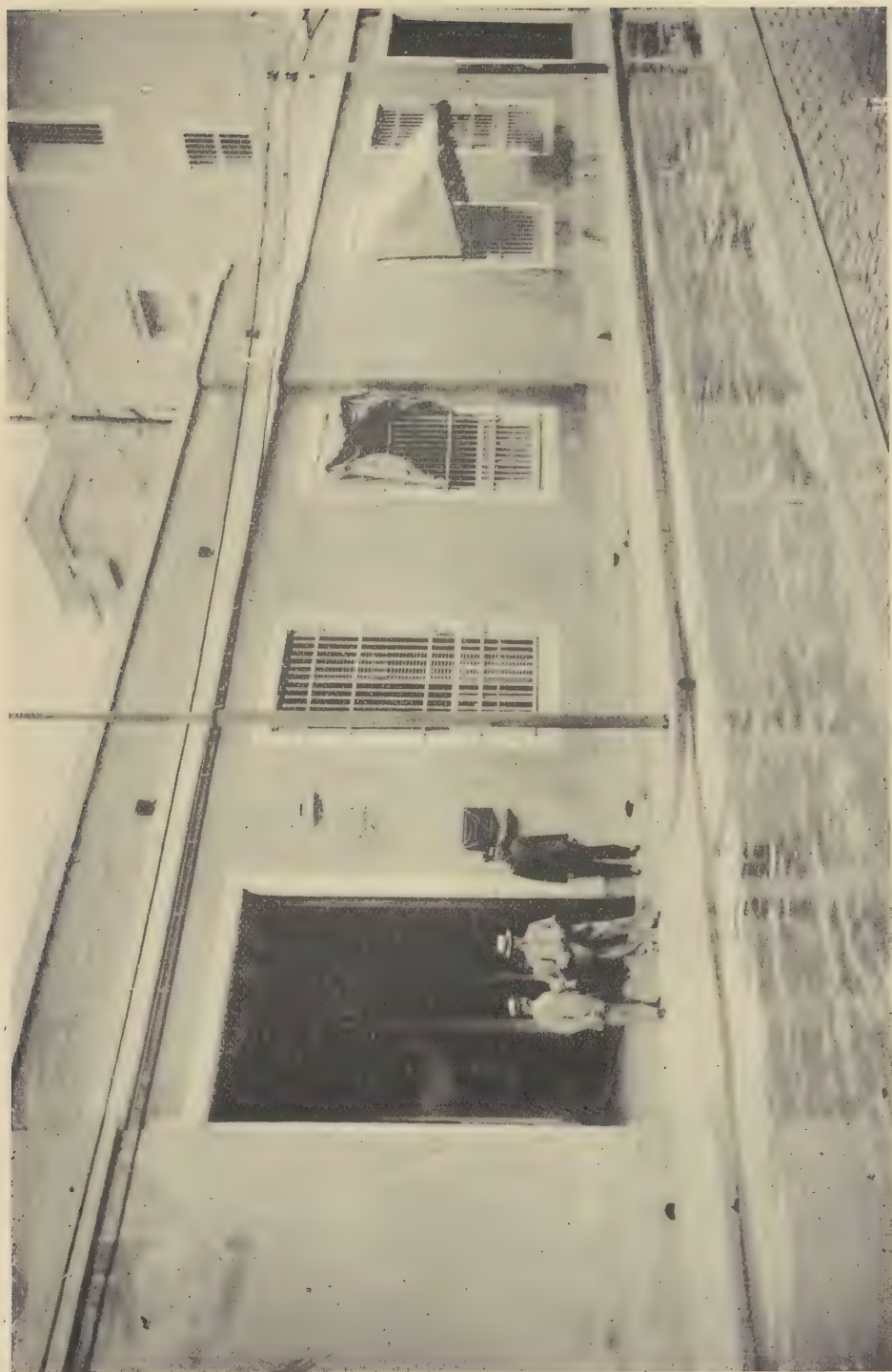
To occupy the office of Director of Sanitation, Dr. Juan Guiteras, was chosen and who from the beginning of our sanitary organization, had given it his valuable aid and services, first as member of the Yellow Fever Commission, and afterwards as President of the Commission of Infectious Diseases and Director of Hospital "Las Animas" and member of the Superior and National Board of Health.

Dr. Guiteras continues, to the advantage of the service, and the benefit of public health, at the head of the Direction of Health, dedicating to Cuba, and the noble cause for which he is so eminently qualified, the fruits of his grand talents, his great knowledge and extensive experience in sanitary matters. He is a modest warrior of positive merits, who daily undertakes rude tasks in the fight against infectious diseases. He has been one of the most efficient collaborators in our great sanitary work and his services, of inestimable value have always been given in a spirit of true devotion to science.

The Direction of Charities, has been since its creation in 1902, up to the present time, successfully occupied by the Messrs Juan Miguel Plá, the former and competent secretary of the extinct Central Board of the Division; by Dr. Pedro Sanchez del Portal, battler and active politician; by Dr. Matias Duque, ex Secretary, and by Dr. Fernando Mendez Capote, a laborious and very notable physician, who from the time he has discharged the duties of positions of high authority as Mayor of Cardenas and as representative in the National Congress, demonstrated the firmness of his character and his love of the cause of all that is good.

Dr. Jorge Vega Lamar, succeeded Dr. Barnet in the position the latter had held in the Sanitary Department, and a few months later the former was succeeded by Dr. Eugenio Sanchez Agramonte, a general in the Army of Liberation, a distinguished physician who had been Director of Public Charities, and formerly Chief Sanitary officer in the Cuban army during the war for Independence.

Dr. Sanchez Agramonte, lover of the cause of public health, worked assiduously, and was a member of many scientific commissions; later



Part of the building on Tacon street, which was first occupied by the De partment of Sanitation in 1890.

on he was succeeded by Dr. Luis Adam Galarreta, who still holds the position and who labors energetically and most competently.

In October 1909 Dr. Manuel Varona Suarez, Representative in Congress and President of the Committee on Health and Charities in that body, was appointed Secretary of Sanitation and Charities.

Dr. Varona proceeded with notable skill in giving great impulse to the different organizations of health and charities. He personally inspected the local health offices and the various charitable institutions of the Republic, duly attending to their needs and amplifying as far as lay in his power, their sphere of action, and carrying to all of them the warmth of his scientific enthusiasm.

In accordance with a special law of Congress, he enlarged and improved the Sanatorium "La Esperanza", and reformed numerous hospitals, amply endowing them. Among his useful projects figured that of transferring of Hospital San Lazaro for lepers; the construction of a hospital for advanced Tuberculosis patients and of the National Asylum. He warmly aided the work of Drs. Hernandez and Ramos, and created the Bureau of Homiculture.

Varona Suarez gave his preferent attention to the problems connected with Pulmonary Tuberculosis; with the water supply of towns and to the great work of popular hygienic education, and one of the most important factor in all labors of a sanitary nature. He created special wards for advanced tuberculosis patients in the hospitals of the Republic, and was resolving with flattering success different problems connected with that disease and formulated a complete plan to organize Special Tuberculosis Services. He studied the reforms needed in the Sanitary Ordinances, prepared the new ones adapted to each locality, promulgated the regulations applicable to pharmacy in conformity with the law which governs that profession; prepared and published the regulations concerning the installation of sanitary appliances; those concerning the general inspection ordered by the Department of Sanitation and Charities and the provincial sanitary inspections; he created the corps of Sanitary Police destined to the service of isolation and vigilance over those attacked with transmissible diseases.

As a counsellor of the President of the Republic, he took part in the preparation of the message of the Executive to Congress, soliciting the promulgation of laws for the campaign against Tuberculosis, the organization of the service of Homiculture in conformity with the results of the investigations of Doctors Eusebio Hernandez and Domingo Ramos; the reconstruction of the general asylum for lunatics, in order to convert it into a model establishment. He was also careful in seeing that the Republic should be represented in a dignified manner in the different foreign medical congresses, and published works dedicated to popular hygiene; the amplification of the "Six O'Clock Closing" Act; for the purpose of improving the condition of the dwelling places of commercial clerks and employees, and to afford them opportunities for bettering their living conditions

considered generally, as a governmental and hygienic measure of the highest sanitary and social importance. He recommended and obtained the incorporation with that of Department of Sanitation of the Bureau of Immigration by means of which great advance was made in the completion of sanitary action. He published in accordance with a decree of the Provisional Government, the works of Dr. Finlay, and established the Immigration station in Santiago de Cuba and at the Key Juan Vicente, in Nipe Bay.

Varona Suarez, consacrated his fecund and happy initiations to the beautiful task of well doing and practical charity, carrying out numerous and most useful measures for the benefit of general salubrity.

In hours of anxiety over bad conditions existing in different parts of Cuba on account of disasters which had afflicted them, Varona Suarez, hastened to remedy, as far as possible, such direful conditions, carrying with him official pecuniary aid, coupled with the inexhaustible kindness of his own generous heart.

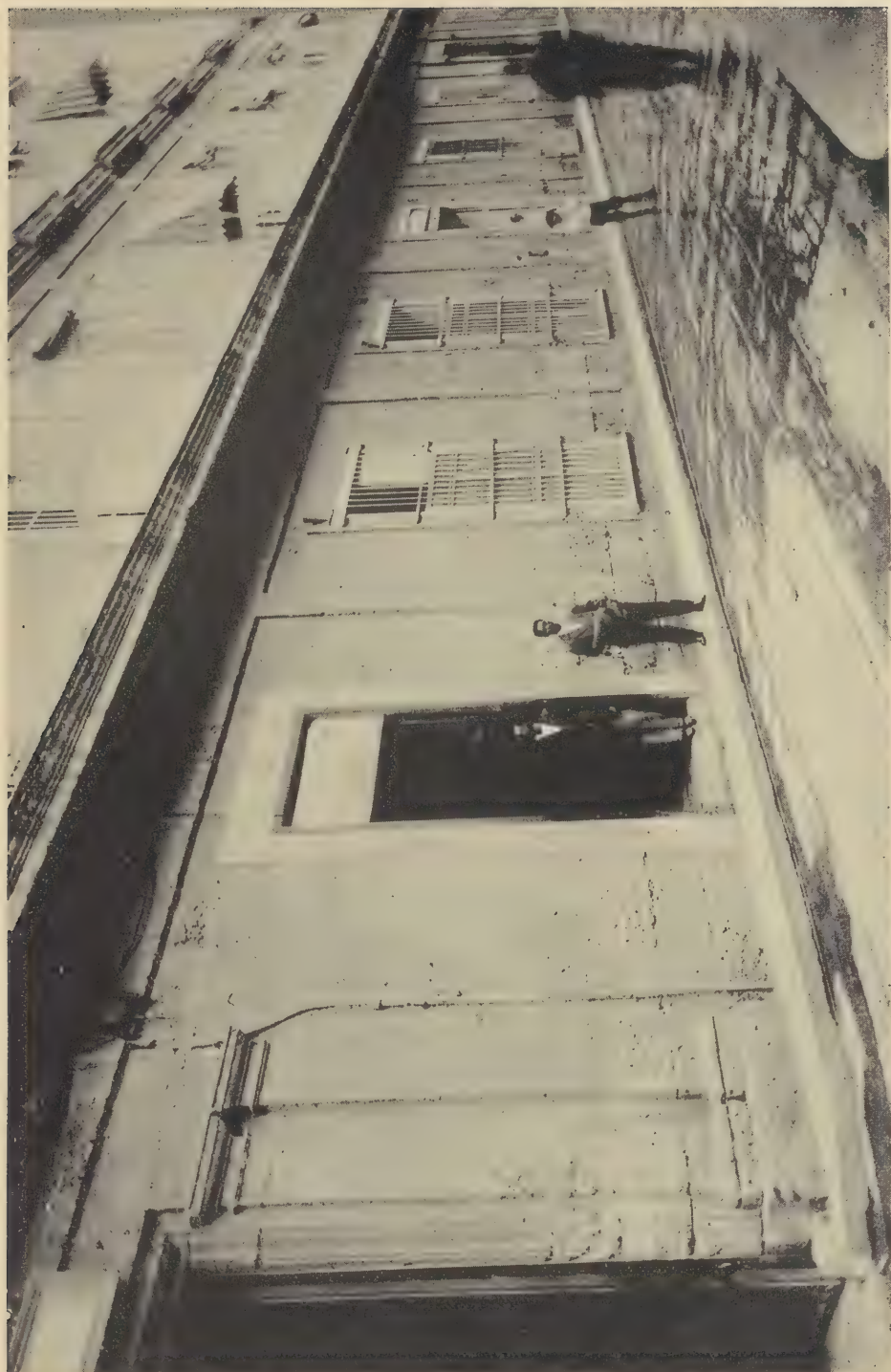
The organization of public charities in Cuba as well as that public health is now so precise and complete, that within a few hours after the occurrence of any serious disaster or catastrophe, even in the most distant parts of the Republic, the aid and assistance of the Central Power reaches the stricken ones, to attend to an cure the wounded, and to difuse in all parts consolation and hope.

And Varona Suarez, in addition to being faithful to the duties incumbent upon him, inspired by his love for all that is good and noble, and by his zeal and enthusiasm in every act of charity, hastened, in those moments of sadness, to sister regions to attend to an relieve their misfortunes. His procedure connected with the calamities which occurred in Pinar del Rio, and during the inundation of Batabano, constitute pages of glory in his life's career and in the history of Cuban charities, which he himself has written with his enthusiasm and with his love!

During more than three years, from the 30th of October 1909 to the 20th of May 1913, Dr. Varona Suarez, remained at the head of the head of the Secretary's office, resigning that position at the termination of the constitutional period of the incumbency of General Gomez, as President of the Republic, and of whose cabinet Dr. Varona Suarez, was a member.

On the 20th of May, 1913 Dr. Varona Suarez, was succeeded in office by Dr. Enrique Nuñez, Professor in the National University, and who had contributed, by his knowledge and experience to the national sanitary organization, as member of the Superior and National Boards of Health, positions which he held in virtue of his being President of the Commission of Special Hygiene.

Dr. Nuñez, interpreting the most earnest desires of General Menocal, President of the Republic, and prompted by his own convictions, proceeded as soon as he had taken charge of his office, to organize the service of Infantile Hygiene, creating the "Menocal Asylum", for



Part of the Maestranza building which the Department of Sanitation occupied until 1910.

children under fourteen years of age and the Nursey (creche) "The Child Jesus", ("El Niño Jesus"); giving all of his aid official and personal, to the different organizations devoted to the protection of helpless infancy.

Through the zeal with which he pursued his official labors in this direction, a great social movement was developed in favor of infancy, and private nurseries (creches) were established for the daily care of infants, as well as the Central Consultories for Infantile Hygiene, and that of the "Hospital Nuestra Señora de las Mercedes".

The services for the protection, official and private, of pregnant women, and children unduly provided for were extended, and made more vigorous, as a measure of well known efficacy in combatting the alarming mortality among the Cuban children, occasioned in the most absolute majority of cases by Enteritis in children under two years old, a disease which decimates our infantile population and figures with terrifying frequency in our statistics of mortality.

The task of transcendent importance, that of educating Cuban mothers in the care they should observe while pregnant, in the defense of their lives and that of the product of conception, was commenced.

Practical lessons were given to mothers of families, concerning the attention demanded by children under two years of age, in reference to their proper alimentation and hygienic conditions, which should surround them. Physicians and Nurses in special Dispensaries and in the domiciles of those to be instructed, with this useful practice and redeeming instruction

Among the measures adopted to solve the problem of Enteritis in children under two years of age, figured that of the inspection of wet-nurses in accordance with sanitary laws governing their profession, watching over the milk supply of towns, due care of the hygiene of the domicile and of the child, and the sanitary preparation of the mother, so that she should know the danger of that disease, and be made aware of the measures to be adopted in order to prevent it.

Dr. Nuñez, created the "Colony of Infantile Sanitary Defence" in the Encampment of Tricornia for two hundred sickly children, for the purpose of attending to their physical development, and in order that they should receive a practical lesson in hygiene. For two months this colony flourished with flattering success, and children who had entered it anemic, thin, weak, infected with vermin and of ill mannered habits, left it clean, strong, lively and well instructed sanitary. It was a powerful work of hygiene and of education.

Through the efforts of Dr. Nuñez, official protection was obtained for two most meritorious private institutions, the "Granja Nuestra Señora de la Caridad" (The Summer School of Our Lady of Charity), the establishment of which is due to the superlatively meritorious Dr. Manuel Delfín; and for the "Bando de Piedad" (Band of Mercy), to which the Secretary of Sanitation and Charities ceded an edifice, suitable for the installation of its Offices, Dispensary, Asylum and Consultory.

Dr. Nuñez understood the arduous and thorny task of putting the properties of the Department of Charities into a thoroughly sanitary condition, undaunted by the magnitude of the undertaking and undismayed by the greatest of the many obstacles which presented themselves:

He transferred the offices of the Department to a building belonging to the government; and for that purpose he adequately fitted up the comedious building known under the name of "Las Viudas" (The Widows).

Dr. Nuñez, attacked with descision and extraordinary firmness, the arduous labor of cutting at the root, one of our social evils, public prostitution and the laws governing it which from old time colonial days had figured as an institution subject to the patronage of the State, which for this reason recognized the existance of the "Social cancer" and in a certain sense protected it, or to use the official phrase: "tolerated it".

It was necessary to carry out the work of social sanitation, all of the energy and preseverance of Dr. Nuñez, were enlisted and with the keen knife of the surgeon, he amputated with serenity and firmness that gangrenous net work which infected our social ambient.

To Nuñez, is due the successful efforts for bringing to a happy termination the questions concerning that work of transcendental importance; the construction of the National Hospital "Calixto García", which will be erected upon the site of the present existing ruinous and anti hygienic hospital "Number One", and which will demonstrate to Cubans and the strangers from abroad who visit it, how zealously the Government of Cuba watches over and shelters those unfortunates ones who as are overcome in the struggle of life.

Near this hospital, there arises, imposing and grand, that of "Nuestra Señora de las Mercedes", an exemplary institution, which is always presented as a model, and which in great part owes its existance to the altruistic labors of Dr. Emiliano Nuñez de Villavicencio, father of the present Secretary of Sanitation and Charities. Providence has desired to bring about on that piece of soil, the reunion of two institutions of piety, consacerated to all that is good, and to instruction concerning it, and these two institutions, will owe their existance to the initiative steps taken by two Cuban physicians, one of whom is following the beautiful example set by his father.

Dr. Nuñez, inspired the message of the President to Congress, recommending the creation of small hospitals for quarantine in different towns of the Republic, repeating his laudable efforts for the installation of the hospitals for children and for the creation of four asylums for old and destitute persons; projects which are now being considered by the Legislative Powers, and there is also under consideration a resolution providing that when lottery tickets have obtained prizes, and the amounts due on them, have not been collected by the owners of the tickets or their representatives, the proceeds of all such unpaid premiums shall be made use of for charitable purposes.



Privately owned building, at San Lazaro and Belascoin streets, which was occupied by the Department of Sanitation and Charities from 1910 to 1913.

Like Varona Suarez, Dr. Nuñez, insists on the necessity of the reconstruction of the State Insane Asylum, as its present bad sanitary condition provokes much adverse public comment and is the cause of much preventable and unnecessary suffering on the part of the inmates confined there.

Among the projects which Dr. Nuñez, has under consideration, is the creation of a central school for nurses, which will include those which now exist in different hospitals: the construction of buildings suitable for hospitals in Bayamo, Ciego de Avila, and Victoria de las Tunas, which at present are installed in inadequate buildings owned by private individuals.

Workingmen's Insurance, an institution of great advantage to the working classes and which contributes to the defense of his health and general welfare is also the subject of much study and consideration on the part of the Secretary, in order that a duly considered and well worded Presidential message may be presented to Congress, for the purpose of implatning this prudent measure in Cuba.

Dr. Nuñez, at present discharges the duties of the office of Secretary of the Department of Sanitation and Charities.

Our condition as employees in that office, does not permit us to eulogize as it merits, his honorable and energetic procedure, but faithful to our purpose to duly note the most salient facts, and those which display themselves in most conspicuous manner our sanitary development. We have not hesitated to set forth the improvements which are due to him and if any one can discover such eulogies in our discourse, they do not come from any impure motive on our part, but to the labors of Dr. Nuñez, and not to our mention of them, are due those applauses and congratulations.

Cuban sanitary matters during the epochs of Varona Suarez and of Nuñez, have been subjected to rude tests, from which they have always come forth triumphant, demonstrating the excellence of the organization; the intellectual capacity of its directors and employees, and the zeal displayed by our government in the solution of all problems connected with the public health giving them the scrupulous care which their importance demands.

Cuba has triumphed in those jousts of knowledge, of labor and of experience. Its sons have proven before the entire world that they are held, as a people who march in the vanguard of progress and civilization.

While Dr. Varona Suarez, was Secretary in November 1911, he had notice of an outbreak of yellow fever in Banes, in the Province of Oriente. The notice was received on Sunday, and in two days time, which is required for the transportation of men and material the barracks occupied by those attacked by the disease, had been fumigated and the corresponding sanitary action duly executed. Later on the cases were proven to be negative, but the activity and energy of the Sanitary Department were demonstrated, together with the efficacy of

the organization, and the rapidity and precision of the working of the sanitary mechanism.

In July 1912, three cases were discovered in Havana which proved to be of Bubonic Plague. Dr. Varona Suarez organized with surprising rapidity, extraordinary services to combat the infection, not hesitating to furnish all resources necessary to undertake a rigorous campaign against this fearful disease.

The service of deratization was organized, and those of cleaning and disinfecting, and the medical and sanitary inspection of public buildings and private residences were rigidly enforced.

In 1911 we were threatened with the invasion of an epidemic of cholera and the Department, with Dr. Varona Suarez at its head, demonstrated its skill and activity. It prepared and arranged the forces necessary to save Cuba from that infection. The lazaretto or quarantine station at Mariel, being given an adequate aqueduct.

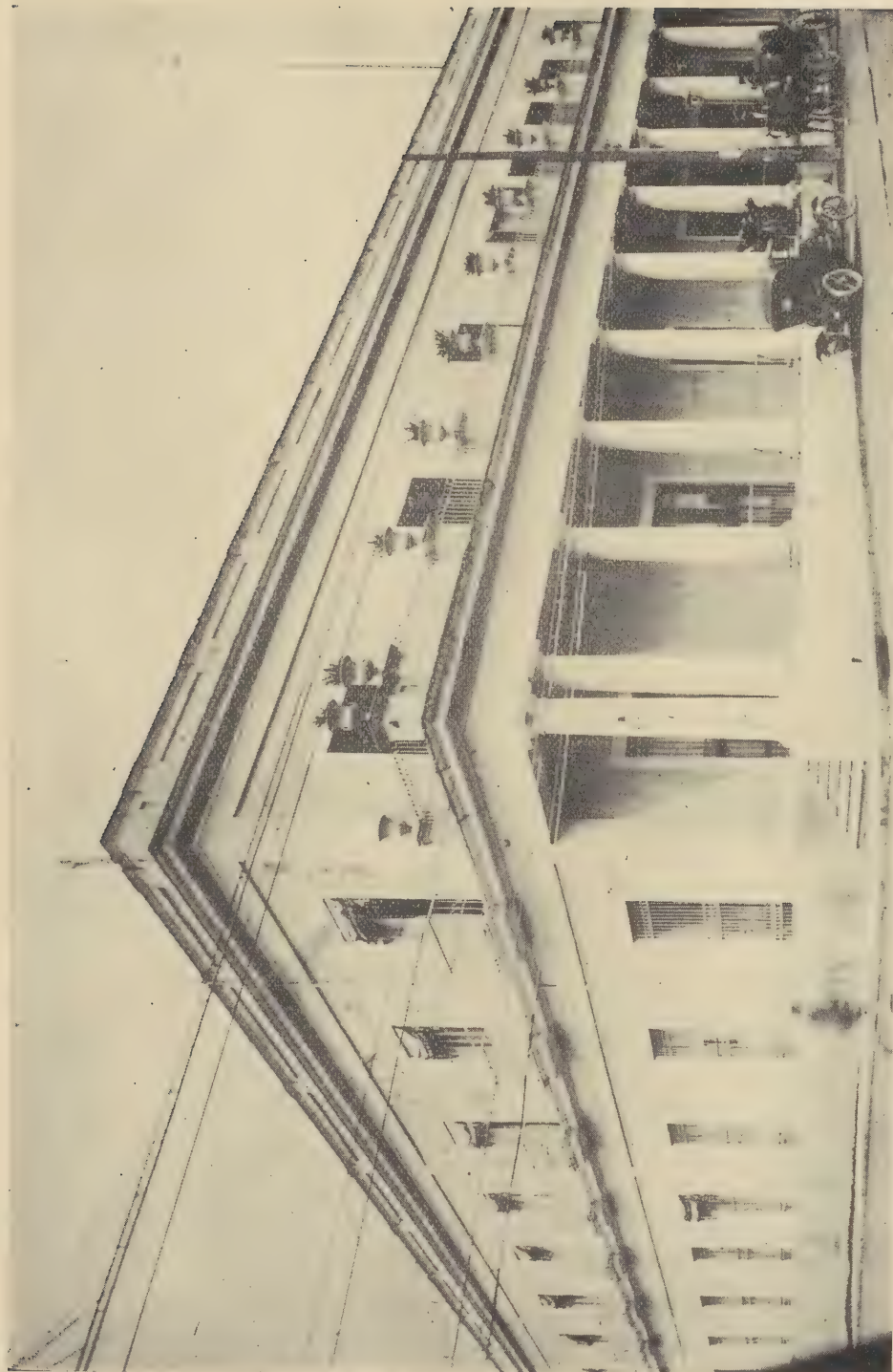
Later on, in March 1911, Dr. Nuñez, being Secretary, a new outbreak of Bubonic Plague occurred, and in the City of Havana, 24 cases were registered, one case in San Jose de las Lajas, one in Artemisa, and one in the roadway of Güines; of these 27 cases terminated in deaths.

In Santiago de Cuba, 10 cases occurred and in Aceite, Caney, four cases were registered, making up a total of 14 cases of the Plague in Oriente, of which three were fatal.

The Plague, although propagated in the interior of the Republic, was quickly stamped out, conquered by the opportuneness, efficacy and proper direction of the organized sanitary services.

In the month of November of the present year, 1914, there occurred in Havana three cases of small pox, which infection was rapidly dominated and confined to a single ward of the city, on account of there being put in force the law of compulsory Vaccination and revaccination. The Secretary's office, the City Council, private individuals and the entire people, responded nobly to the requirements of the sanitary authorities and putting in force that, redeeming and preventive practice of vaccination and revaccination, Cuba again exhibited to the entire world a beautiful example of her most excellent organization of Health and Charities, in virtue of which transmissible diseases may be combatted with flattering success, limiting to the place in which they originate, the most fearful epidemics. To assist promptly and efficiently at distant localities, and defend whenever it may be necessary, threatened public health and to succor and sustain the unfortunates overcome in the struggle for existence, constitutes the mission of our sanitary and charitable organizations.

The development of Cuban sanitation and charities has been slow, of firm and steady progress. From "nothing" in January 1899, when the American Government created the Department of Sanitation and Charities of Havana, of a relatively small sphere of action and limited to this capital. Later on its services were amplified and extended, and in 1902, the first steps were taken to extend sanitary benefits to all parts of the Republic.



State-owned building which is at the present time occupied by the Department of Sanitation and Charities.

In 1906, the Department and National Board of Health was created, and in 1909, the Department of Sanitation and Charities was established, Cuba being the first nation that could present the harmonious, complete and excellent organization in which all branches of public health and charities are united, and placed under the personal direction of a Secretary, who is a member of the cabinet, and responsible for the progress of the services confided to him.

The Secretary of Public Works, who is in charge of important branches of sanitation, accompanies the Secretary of Sanitation and Charities in his onward and upward march toward perfection, and contributes to the improvement of sanitary conditions in all parts of the Republic.

Since the year 1899, the Department of Public Works has organized in a most complete manner the services of cleaning and sprinkling of streets and the collection of and disposal of garbage in Havana and other principal towns in Cuba. It improved our roadways and other means of communications, repairs and cleans our streets in such manner as to call forth just applause. This street cleaning service is one of the positive factors in the general work of hygiene undertaken. Promenades are constructed, parks laid out, infected ditches are canalized, marshy grounds filled in, and the capital cities of Cuba and especially Havana, commence to take on the features of the most advanced civilized, culture and refined centers of population, the wide world over.

The Department of Public Works continues its great undertakings. It constructs aqueduct and improves those already constructed, sewers and paves the streets of towns, and the white ribbons of roadways are extended through green and fertile plains, hills and dales, carrying in their course urbanization, progress and wealth.

The different secretaries of the Executive Power in Cuba, reaching public sentiment, and aware of the advantages and benefits which arise from an improved condition of public health, which means general welfare, cooperate as far as possible in the great work of sanitation. The Secretary of State constantly gives out information concerning the existing sanitary conditions in foreign countries, and furnishes valuable facts and notes having reference to these conditions. The Secretary of Government exacts from the City Councils their proper attention to sanitary matters in the districts under their respective jurisdiction. The Secretary of Public Instruction, requires the education of the rising generation in accordance with the principles of modern hygiene. The Secretary of the Treasury, furnishes the funds necessary to defray the expenses of carrying on sanitary campaigns. The Secretary of Agriculture, Commerce and Labor, attends with zeal to the problems connected with diseases among cattle and other domestic live stock, and their epizootic laboratories, prepare and distributes gratis vaccine virus, and popular instructions for combatting epidemic diseases among animals. The Secretary of Justice, demands proper execution of the sanitary laws and regulations and in a general way all of the depart-

ments of the government cooperates with zeal and decision with the Secretary of Sanitation and Charities, in his beautiful labor of protecting public health.

The action of private individuals forms an active and most important part of this work of general benefit. The proprietors of urban properties have transformed their residences, beautifying the cities by their own personal efforts, and have constructed wards of modern hygienic buildings the architectural elegance of which compares favorably with that of the most advanced nations in this respect. They approve of sanitary orders and promptly, comply with them, and never present any obstacles in the way of carrying them out.

The private organizations, associations and institutions, have followed the public and official ones in the path of progress. The private health resorts and hospitals are being amplified by the constructions of sumptuous and hygienic buildings destined to the use of their patients.

The hospital San Francisco de Paula of Havana, was transferred in 1909 from the old ruinous, ramshackle barracks it then occupied to modern edifice especially constructed for the purpose in Jesús del Monte, and duly provided with all necessary modern appliances. In 1908, the Hospital "Caymari" of Manzanillo was inaugurated. This hospital owes its existence to the generous legacy of a most worthy Cuban named Caymari, whose name it bears.

The Asylum for Asisties, which was found in an infected house in this city, constituting a fearful source of infection and an offense against the ornate, has just been inaugurated in its new edifice in San Miguel del Padron.

The private Hospitals (Casas de Salud) "Balear", "Canaria" and the Sanatorium "Malberty", have already acquired sites upon which they will soon build their hospitals, which will be up to date in every respect.

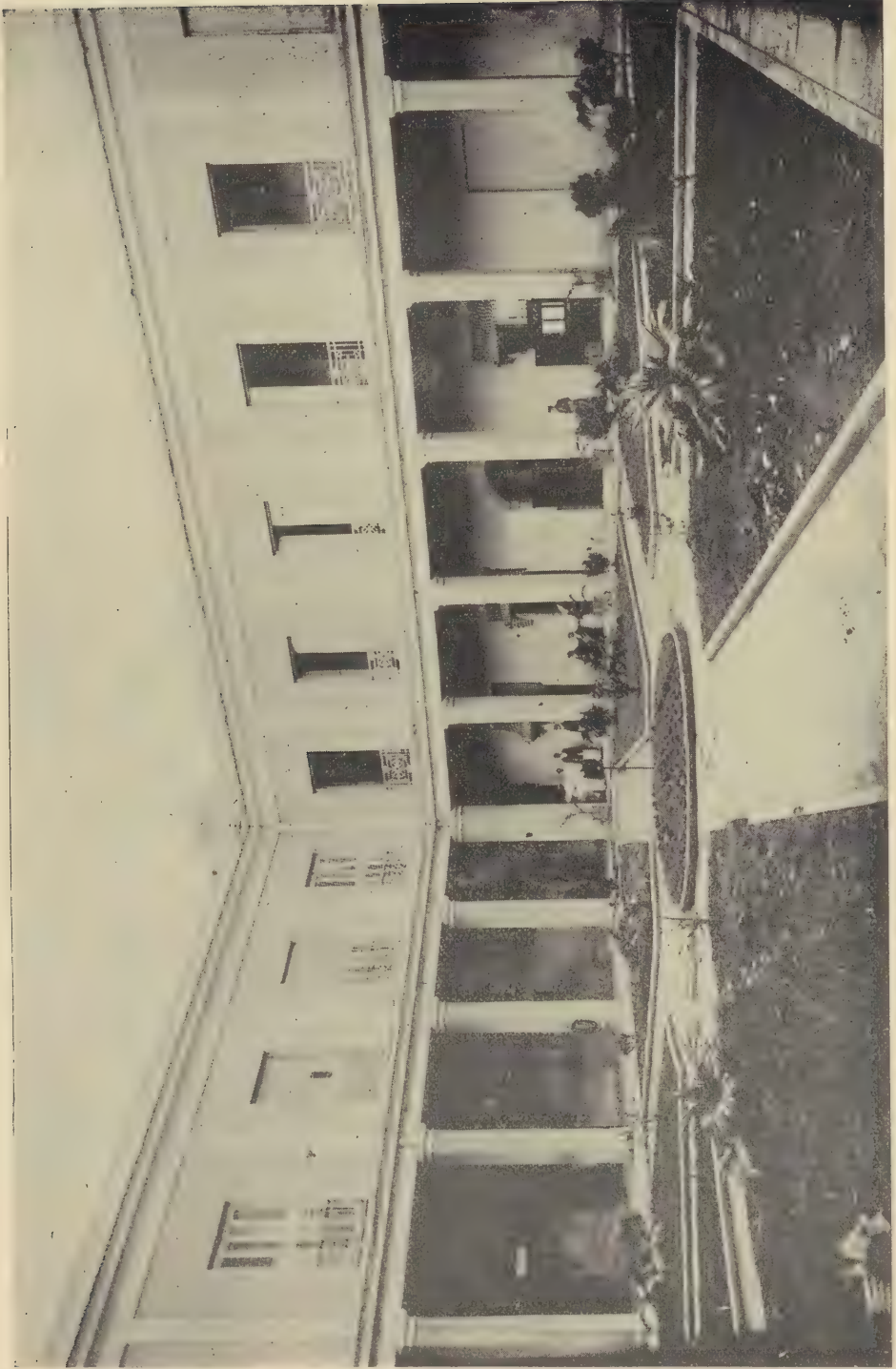
In all parts of the Republic, there are established general and private surgical clinics, equipped with the modern conquests of sanitary science. Many of them being models among that class of establishment.

All above set forth, goes to show that the great work of transformation of all matters pertaining to sanitation and charities, become, so to speak, national now that the different elements which go to make up Cuban nationality, take part in it, official, as well as personal, all in friendly rivalry, striving to reach the highest degree of progress and perfection.

Such has been described only in imperfect outlines, our sanitary evolution, and the generous labor of renowned medical men, foreign and native, who have directed and continue to direct our sanitary affairs. The triumph already achieved and those which have to be reached in the future, redound to the benefit of humanity and to the honor of our native land.



Entrance of the Department's building.



Court yard of the building of the Department of Sanitation.



Office of the Secretary.



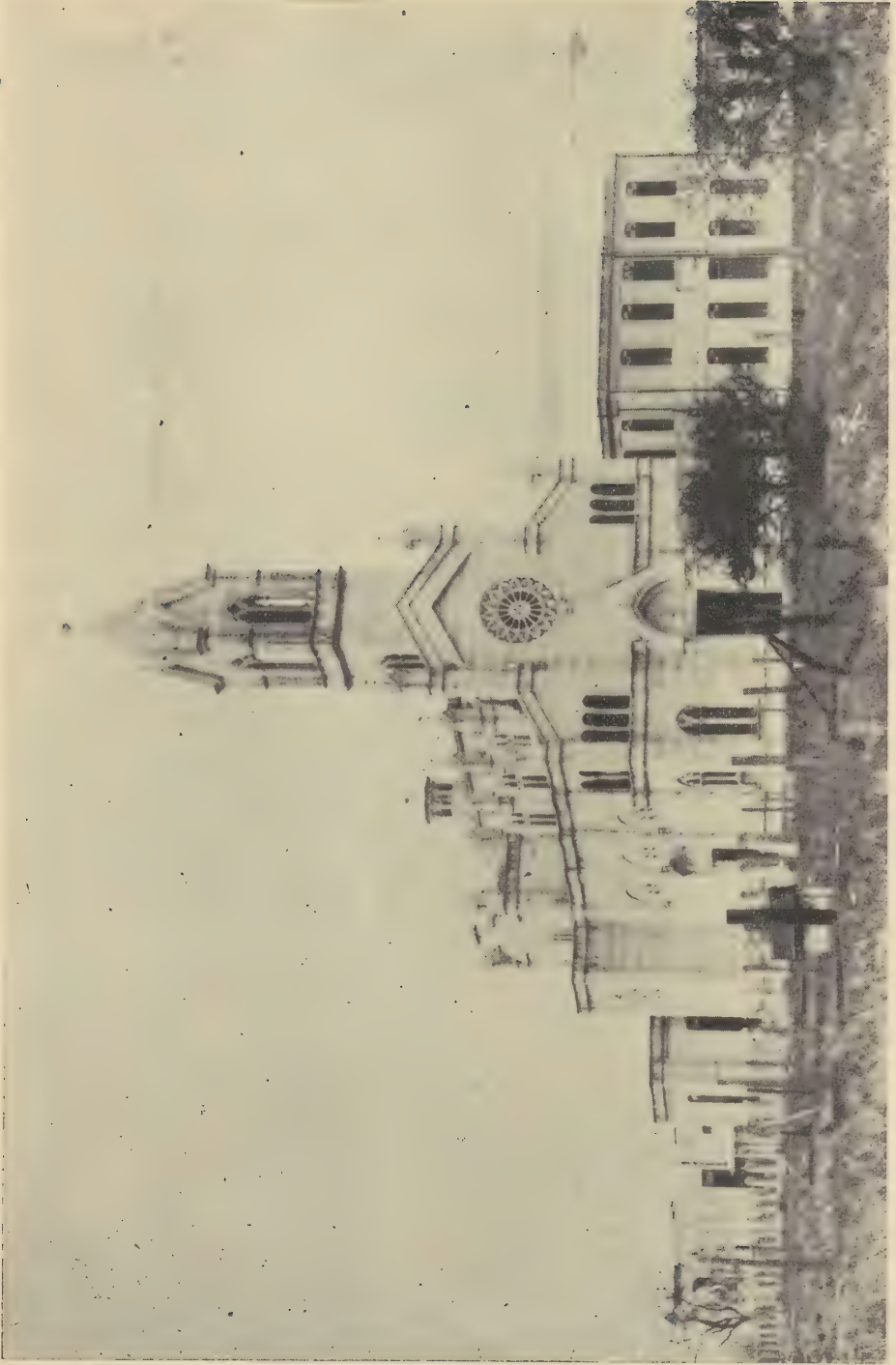
A general view of the Department of Sanitation and Charities.



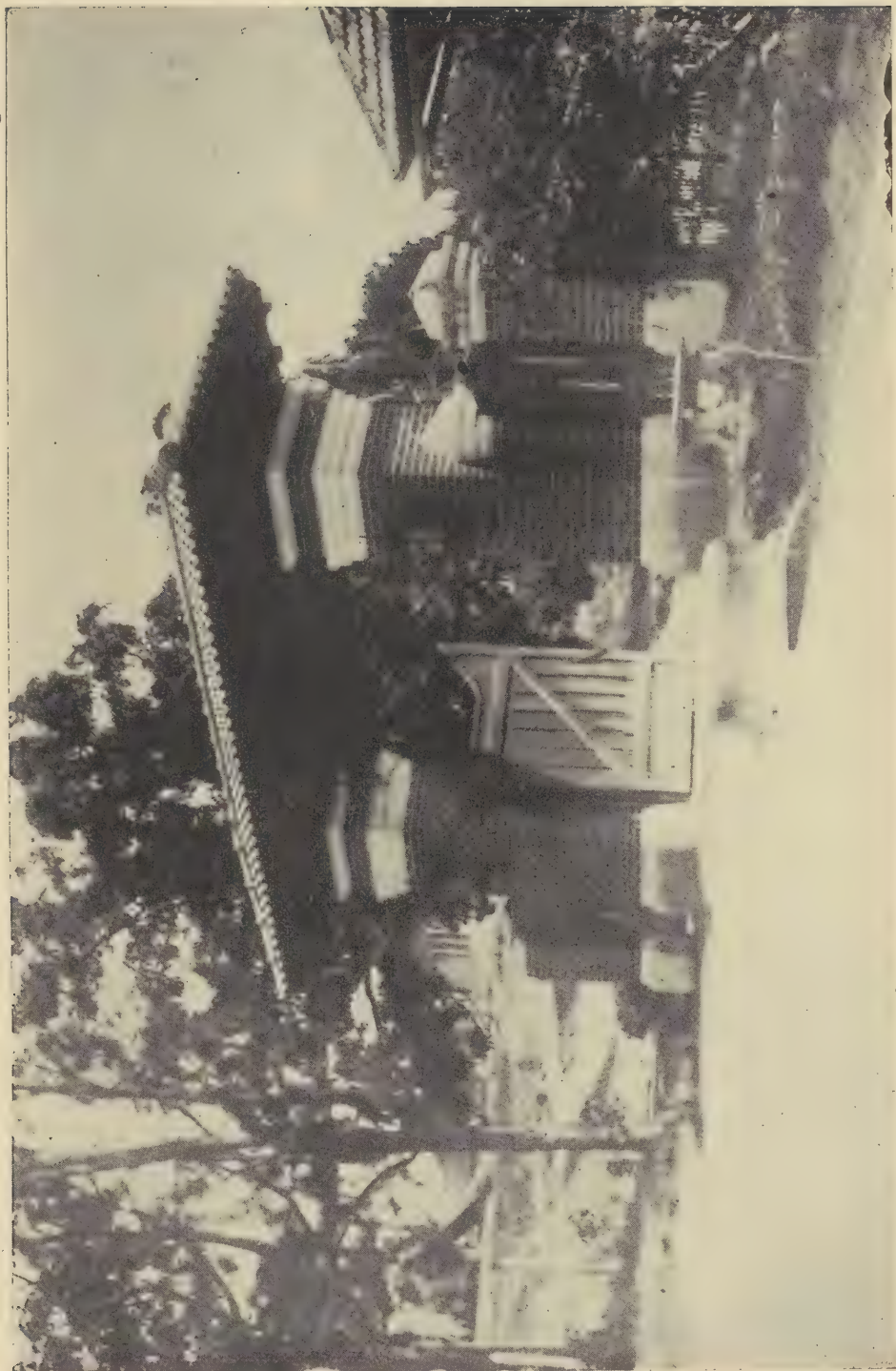
A general view of the Department of Sanitation and Charities.



"Nuestra Señora de las Mercedes" Hospital.



"San Francisco de Paula" Hospital.



Entrance of the Sanatorium "La Esperanza".



A general view of the pavillions of the Sanatorium "La Esperanza".



Entrance of the Modern Chinese Asylum.



A general view of the Asylum.

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*Camino de Esparto de la
Una ciudad.*

PROYECTO
DE HOSPITAL NACIONAL
"GENERAL CALIXTO GARCIA"
AÑO. - PERSPECTIVA. MCMXIV.

Plans for the new National Hospital "Calixto Garcia" now in the course of construction.

REFERENCIAS

1. El Hospital Militar en el Campamento de Colombia, en perspectiva, por el Sr. J. A. M. de la Cruz, Ingeniero de Camión, y el Sr. J. A. M. de la Cruz, Ingeniero de Camión.
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HOSPITAL MILITAR EN EL CAMPAMENTO DE COLOMBIA - PERSPECTIVA

— BARRIO DE LA CRUZ —

— LINDERO DE LA CRUZ —

— LINDERO DE LA CRUZ —

— LINDERO DE LA CRUZ —



SECRETARIA DE OBRAS
PÚBLICAS

SECRETARIA DE OBRAS
PÚBLICAS

Palms for the new Military Hospital at Camp Columbia.



"Las Animas" Hospital. Dr. Guiteras, Director and Dr. Cartaya, Vice Director.



Entrance of the Tricornia Encampment.



DR. FRANCK E. MENOCAL.

Commissioner of Immigration.



Immigration Department, Triscornia. Hotel for Immigrants.



The "Duque" Laboratory for Study and Scientific Research.



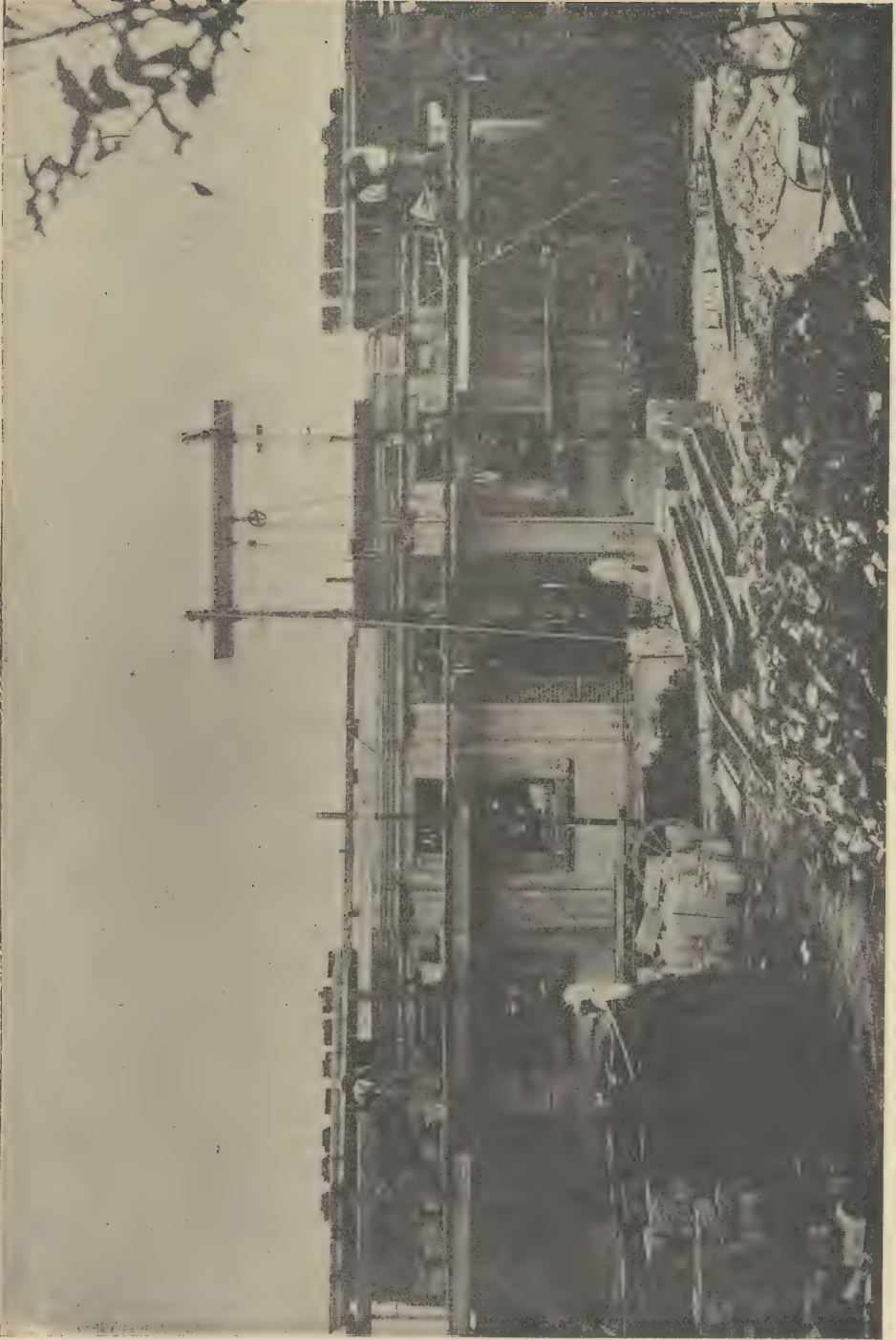
The present Hospital No. 1.



Library of the Department of Sanitation. Dr. Barnett, Chief of the Section and his assistants.



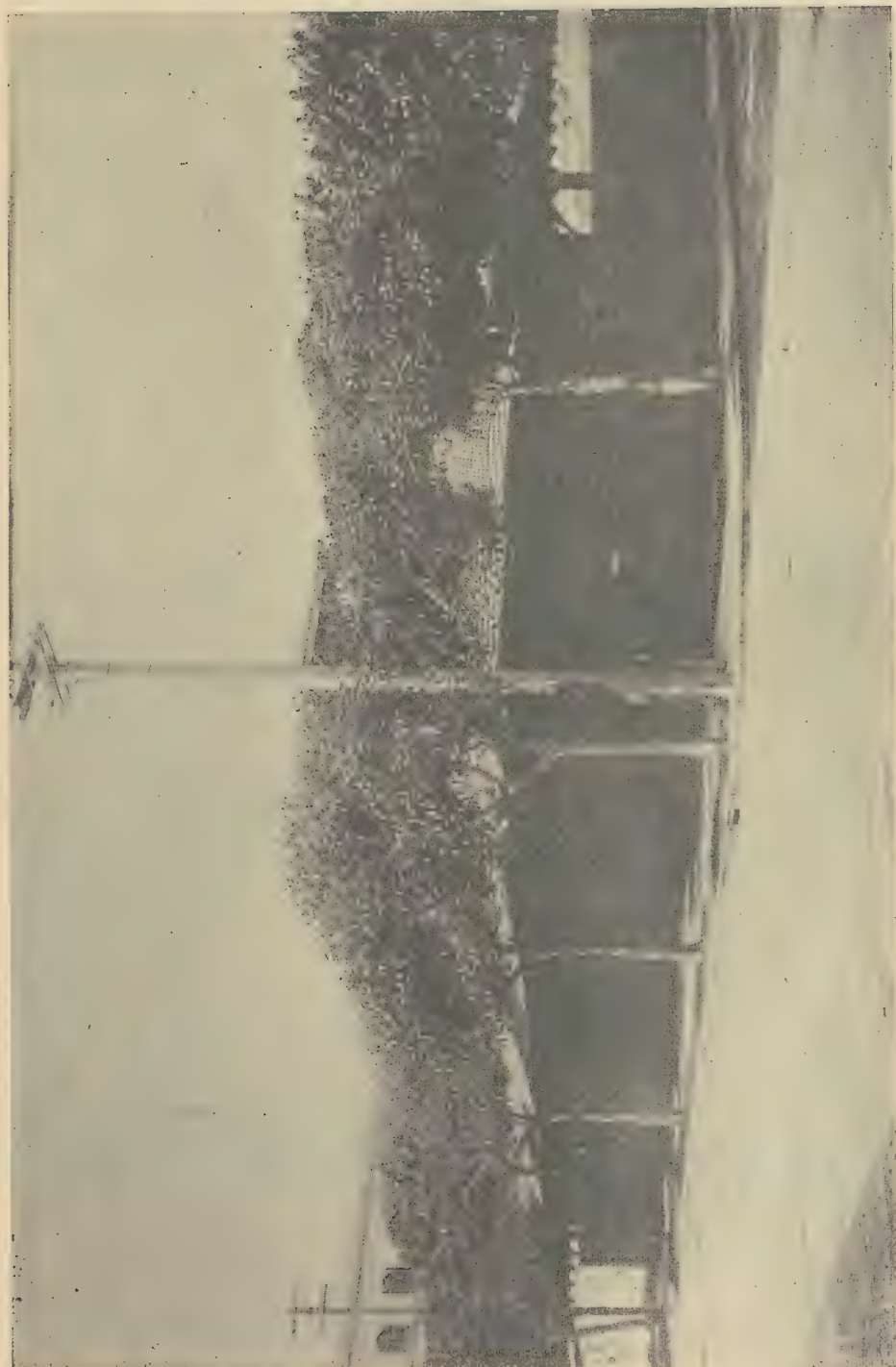
DR. HUGO ROBERTS.
Chief Quarantine Officer.



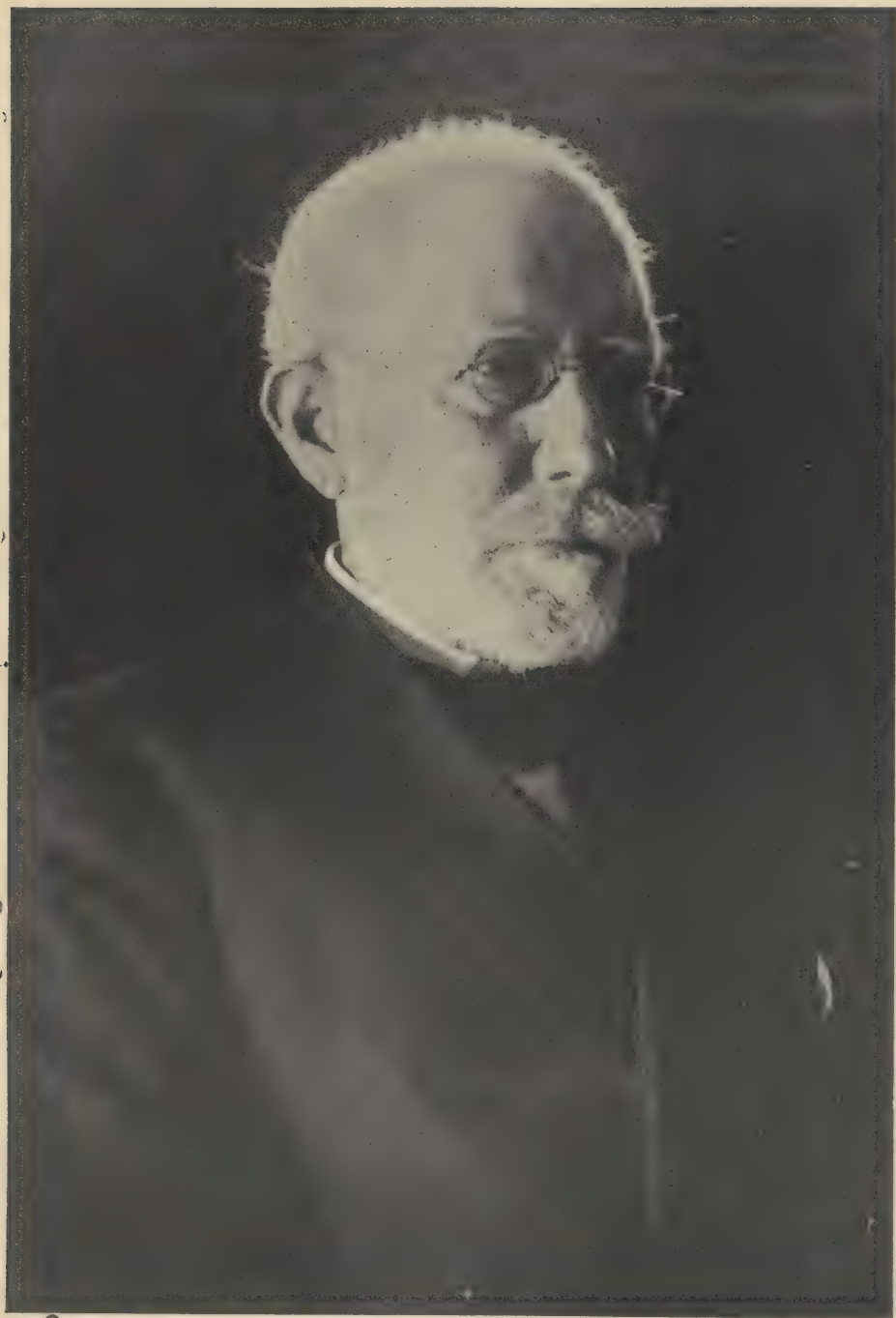
Building in construction for the Laboratory Scientific Studies and Investigations, within the grounds of "Las Animas" Hospital, and of which Dr. Mario G. Lebrede, is the head.



Another view of the Laboratory under construction

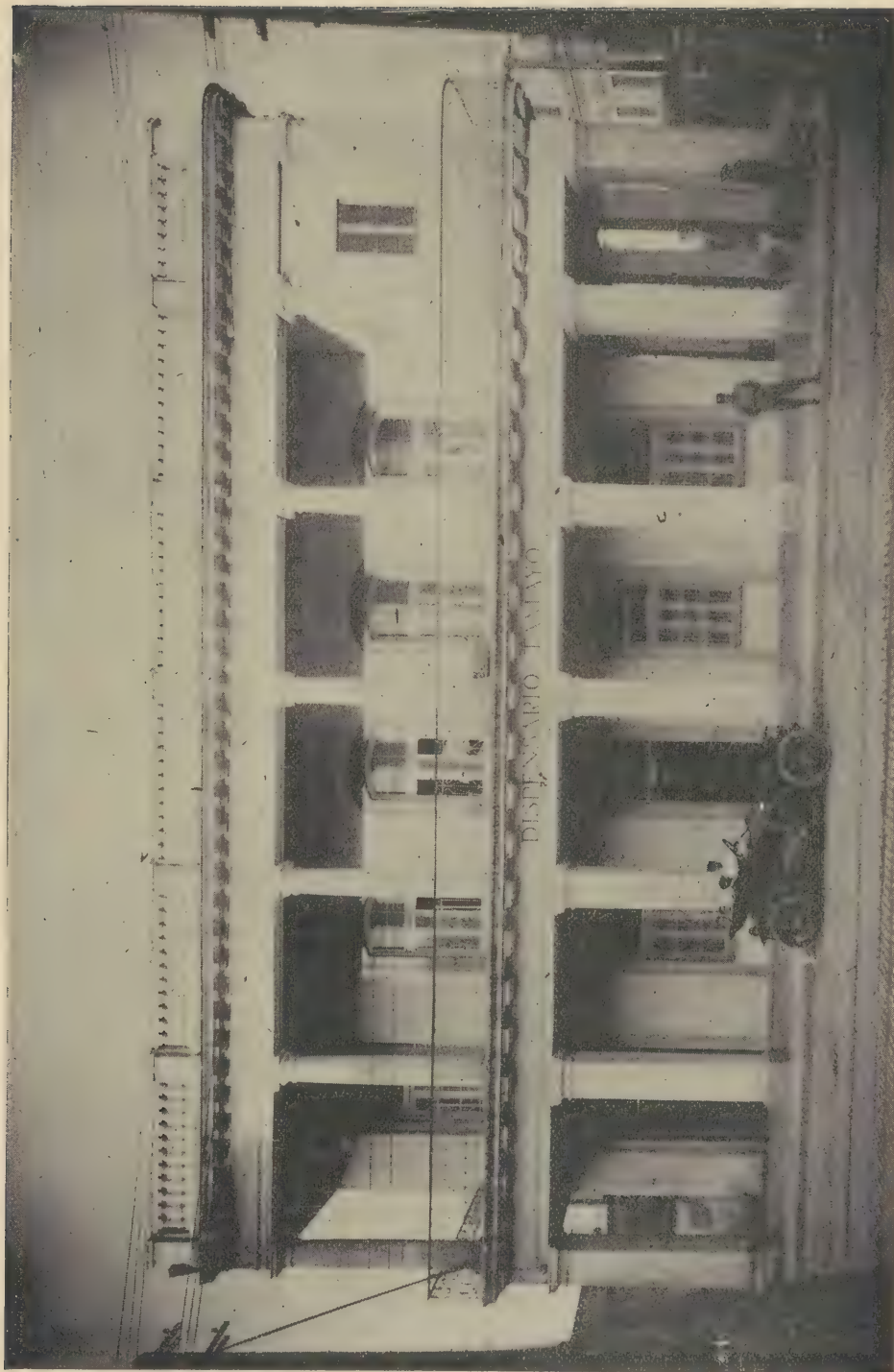


General Vaccine Bureau.

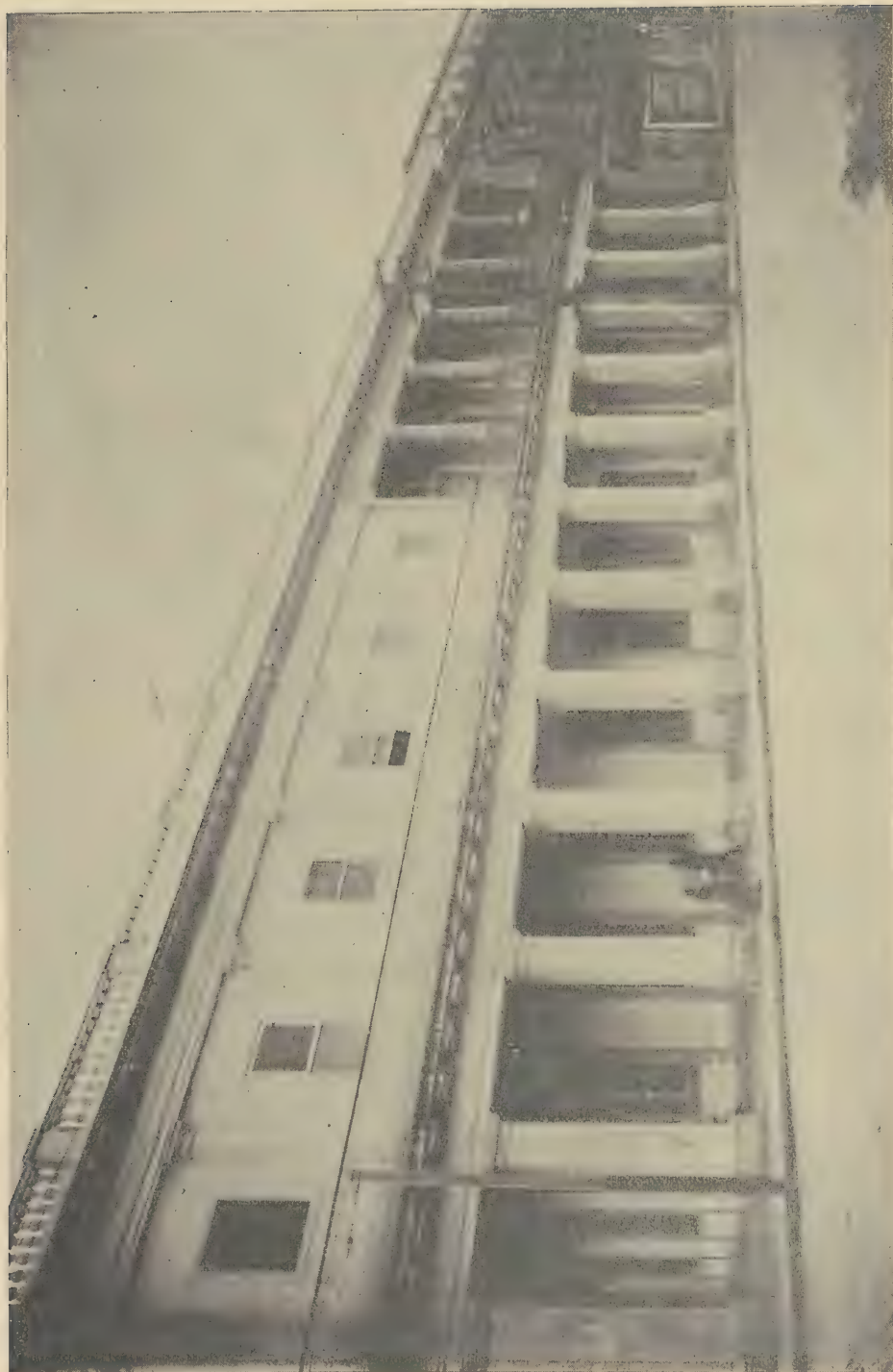


DR. VICENTE DE LA GUARDIA.

Director of the General Vaccine Bureau, and of those who prepared Order No. 165,
which declared vaccination obligatory.



The "Tamayo" Dispensary, where there is also located the Central Consultory of Infantil Hygiene.



The Dispensary for Tuberculosis.



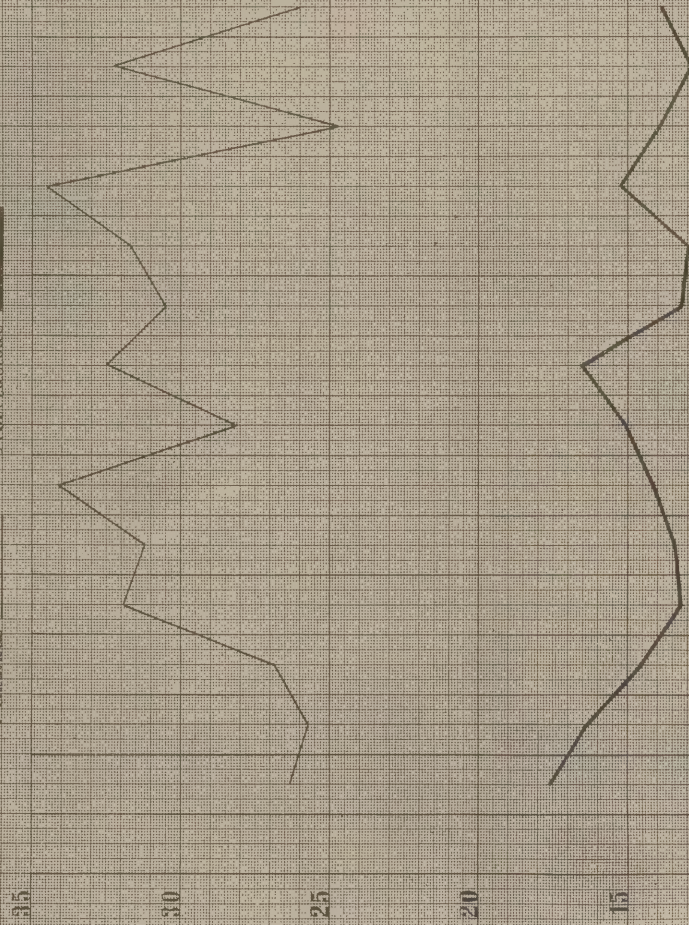
Monument which is to be erected in the Court-yard of the Department of Sanitation and Charities, in honor of the genial Finlay.

República de Cuba

Natalidad y Mortalidad. Años 1899-1914.

Natalidad

Mortalidad



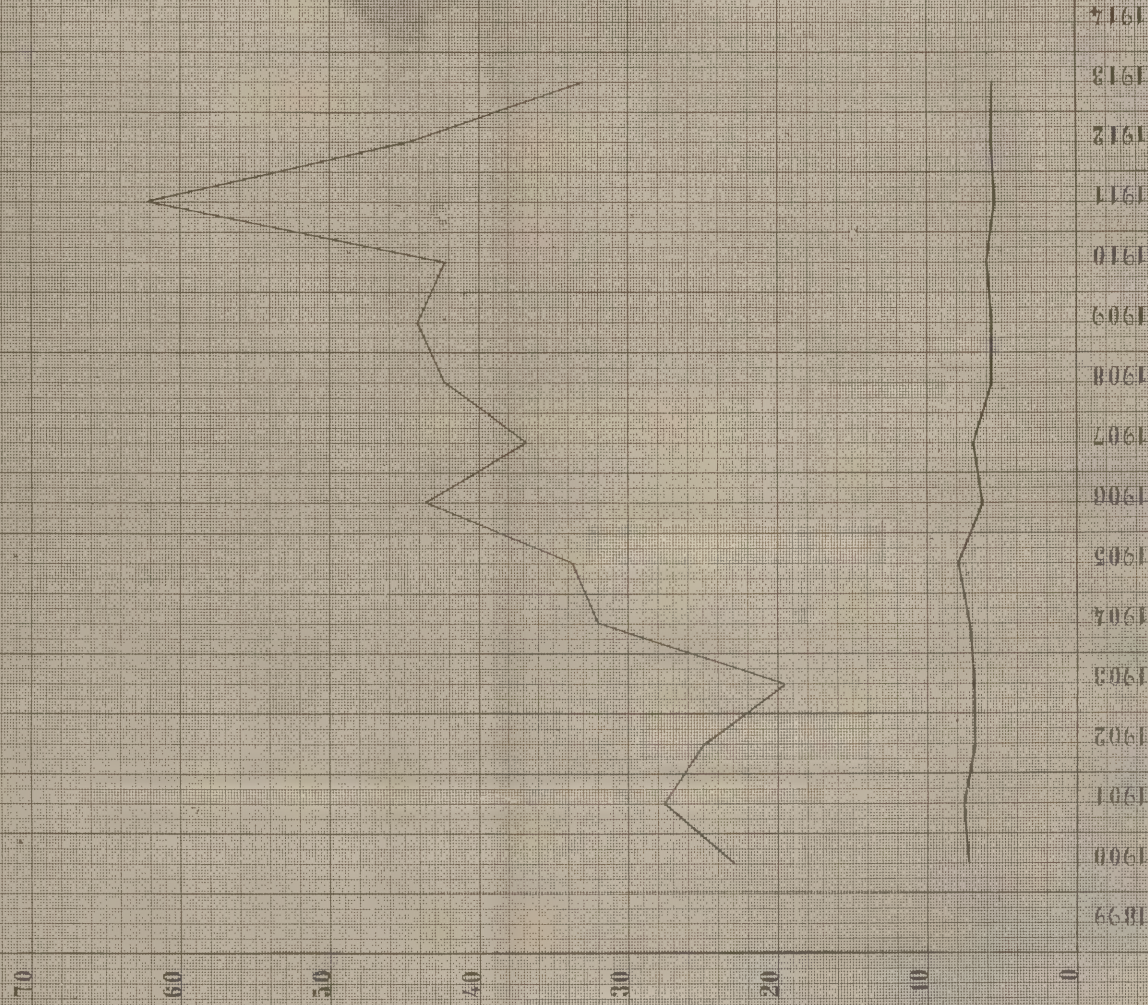
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República de Cuba

Superficialidad y Mortalidad. Años 1899-1914

Mortalidad

Superficialidad

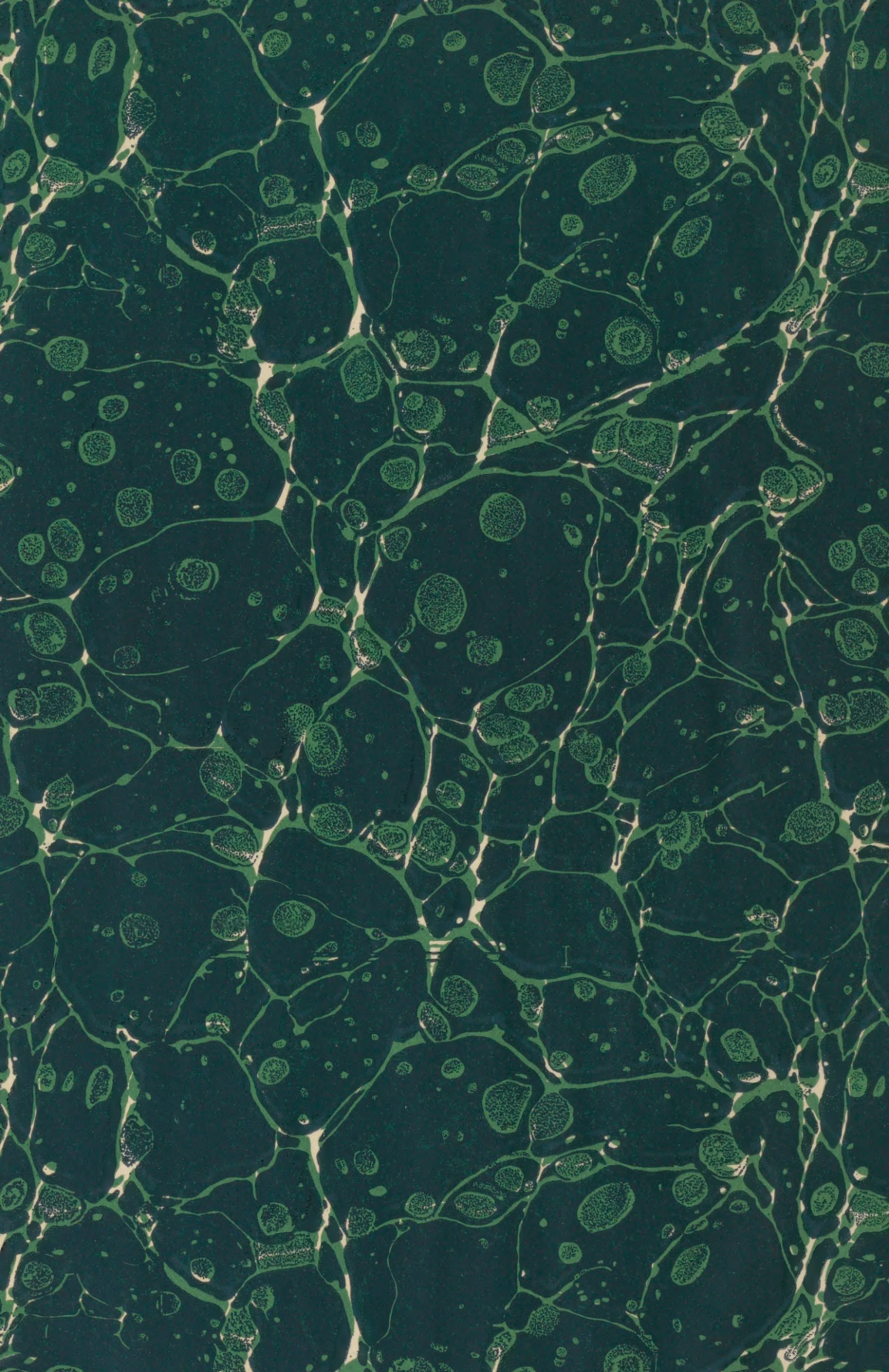


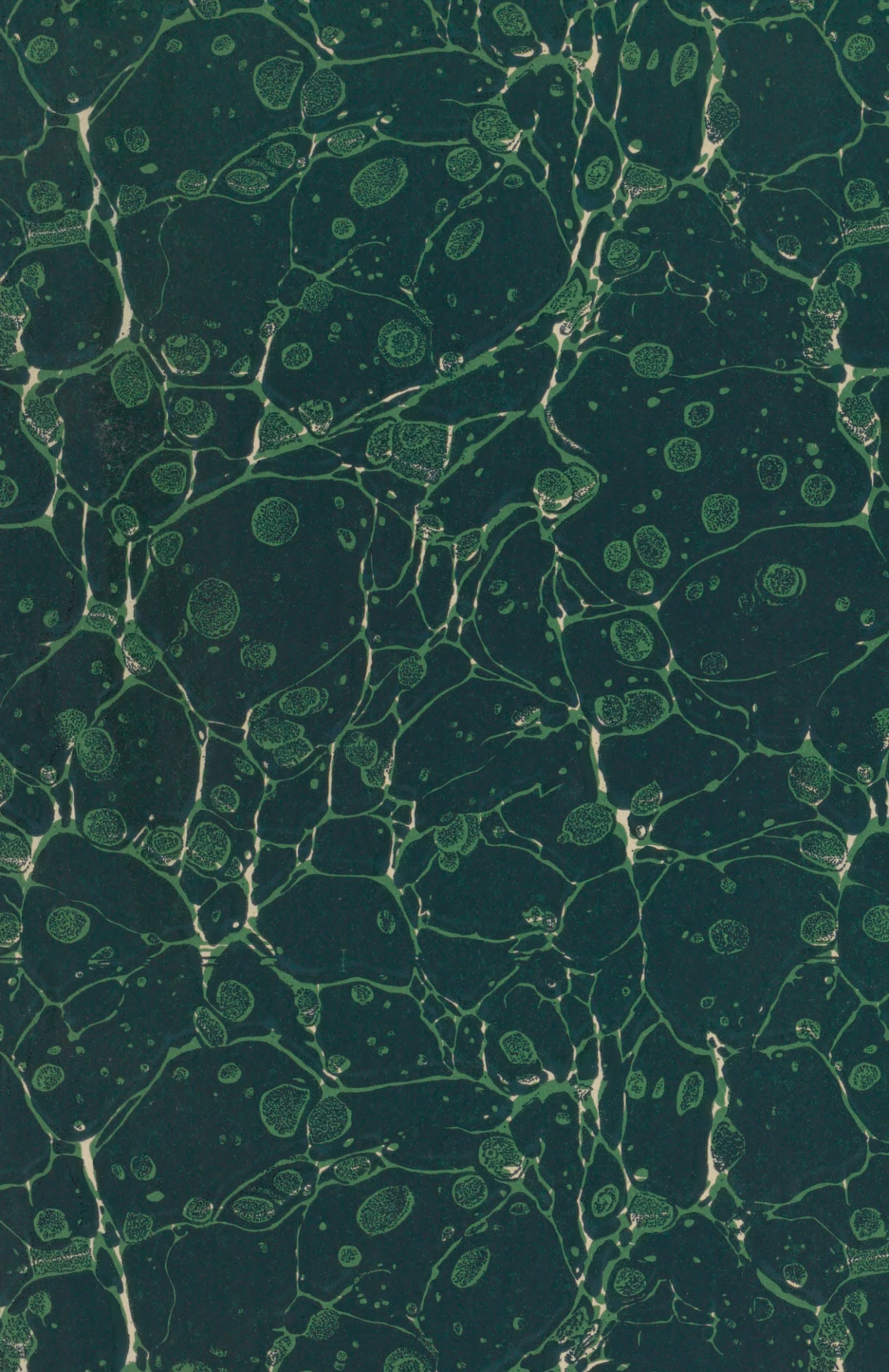
Superficialidad en cada 1000 nacimientos

There remains for our solution various and very complicated "internal" sanitary problems, which we have to attack with renewed energy; the struggle against Tuberculosis, Cancer and Typhoid fever. We have to persevere in the grand work of infantile hygiene, and of sanitary propaganda, in order to dominate infectious diseases, which effort require the conscientious support of the public, in the official sanitary labors carried in order to dominate them.

It is necessary to amplify the services of milk inspection in order to obtain the chemical and bacteriological purity required in this article, and to secure proper hygienic conditions in its transportation, manipulation and sale. The bromatological inspection in general, in order to exact the good quality of food stuffs and beverages and to undertake the work of obtaining by means of wise laws, cheap and hygienic domiciles for poor peoples, as well as to lower the price of alimentary substances of prime necessity.

On extending our glance over the brilliant results achieved by Cuban sanitation and charities, and observing the triumph obtained by them in the course pursued in order to reach perfection, our souls, as Cuban become elated with legitimate pride at the thought of being citizens of a nation which displays such laudable efforts in the promotion of the health of her sons, the most durable foundation for the prosperity and wealth of her people.





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